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DISTRIBUTION OF INSECT PESTS IN COTTONFIELDS

~~By~~ R. E. Fye, *Entomology Research Division, Agricultural Research Service,* and R. O. Kuehl and C. D. Bonham, *Agricultural Experiment Station, University of Arizona*[1]

The insect distributions tabulated here are based on data collected in southern Arizona and other areas of the Cotton Belt during 1967. They are presented for statisticians, biometricians, and entomologists concerned with insect distribution in cottonfields.

Methods

The collected data include information on eggs or egg masses on single plants in solidly planted fields and larvae, nymphs, adults, and damaged fruiting forms in 1-, 5-, 10-, and 20-plant units in 1-acre blocks and in entire fields.

Fields 3–6 (tables 1–5) were surveyed for egg populations on single plants, which were selected at random and inspected thoroughly. The eggs found were identified in the laboratory. The approximate location of each selected plant was indicated on a field map.

The eggs of the bollworm (*Heliothis zea* (Boddie)) and the cabbage looper (*Trichoplusia ni* (Hübner)) are laid singly. Those of the beet armyworm (*Spodoptera exigua* (Hübner)) and the salt-marsh caterpillar (*Estigmene acrea* (Drury)) are laid in masses of varied size.

Fields were laid out early in the season in a grid of numbered 1-acre blocks to determine the distribution and damage counts of these four insects, the pink bollworm (*Pectinophora gossypiella* (Saunders)), the boll weevil (*Anthonomus grandis* Boheman), and the distribution of *Lygus hesperus* Knight. The fields to be inspected were selected at random. They were usually 64 or 65 rows wide and 200 feet long, but the dimensions were changed if the field configuration did not fit into the standard block (table 1). In skip-row planting patterns, only the planted parts were considered in defining the 1-acre blocks.

Sample points were obtained by numbering the rows, then ascertaining the numbers of samples per row from random numbers tables. The distance into the row for each sample point was determined by arbitrarily assigning one end as the starting point and then determining the distance into the row from the random numbers tables. Twenty-five sets of randomization were developed in this manner and used in rotation throughout the season.

In practice, a nylon line with 5-foot lengths delineated by color-coded ribbons was stretched between two stakes in the center of the 1-acre block. This enabled the checkers to quickly establish their position in the row. Large placards were placed at five-row intervals to facilitate the positioning of the checkers at the sample points.

At the sample points the first plant was inspected and the number of insects and damaged fruit recorded. Similar data were recorded after inspecting five, 10, and 20 plants. If the final sample unit was five plants, the inspections ended there, but if 10 plants were the final sampling unit, the checker shifted to the next highest numbered row and inspected five plants returning in the direction of the original starting point. Thus the sampling unit consisted of five plants side by side in adjacent rows. Likewise if 20 plants were the final sampling unit, 10 were inspected in the first row and 10 in the second.

Full field counts were made for fields 3–6. For these inspections, fields 3 and 4 were gridded into 1-acre blocks and fields 5 and 6 into 1.5-acre numbered blocks. The number of samples to be taken per block was determined from random numbers tables. In practice, the inspector randomized the designated number of sample units within each block at his own discretion. The block boundaries were flagged at the ends and sides of the field to enable the inspectors to determine their position in the field. The sampling for each unit was as previously described for the 1-acre blocks.

Fields 4–6 were on the same ranch and consisted of the total cotton acreage in a relatively isolated area. Therefore a consecutive sequence of dates in the tables represents a total sampling of the entire ranch and thus all cotton in the area.

The calculations in the subsequent tables were made with the following equations:

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[1] The authors gratefully acknowledge the assistance of the staffs in this Division's Cotton Insect Research Laboratories at Tallulah, La., Stoneville, Miss., Florence, S.C., and Waco, Tex., in obtaining the tabular data from their respective areas.

$$\bar{x}=\frac{\sum f_i X_i}{\sum f_i}$$

$$s^2=\frac{\sum f_i (X_i-\bar{x})^2}{\sum f_i - 1}$$

$\bar{x}$=mean number of insects per sampling unit

f_i=frequency of the ${}_i$th class

X_i=value of the ${}_i$th class

s^2=variance

$\sum f_i = n$

In many of the tables there is a conspicuous absence of 10- and 20-plant unit samples. They were not taken because of physical limitations at the time of sampling.

The cotton in all fields was grown under the standard grower insect-control programs practiced in Arizona.

TABLE 1.—*Description of cottonfields used to study insect distribution*

Field No. and location	Field size	Row width	Planting pattern: Planted rows	Planting pattern: Skip rows	1-acre blocks: Width by rows	1-acre blocks: Length of rows
	Acres	*Inches*			*Number*	*Feet*
1. Stanfield, Ariz	28	40	All	None	65	200
2. Stanfield, Ariz	24	40	8	4	64	200
3. Picacho, Ariz	30	40	All	None	65	200
4. Red Rock, Ariz	75	40			65	200
5. Red Rock, Ariz	72	40			--	---
6. Red Rock, Ariz	61	40			--	---
7. Amado, Ariz	30	40	4	4	64	200
8. Robles Junction, Ariz	36	40	All	None	65	200
9. Tucson, Ariz.[1]	1	36			40	300
10. Green Valley, Ariz.[2]	30	40	2	2	64	200
11. Tucson, Ariz	27	40	4	4	64	200
12. Avra Valley, Ariz	40	40	All	None	65	200
13. Waco, Tex	52	38			65	200
14. Waco, Tex	20	38			65	200
15. Stoneville, Miss	2	40			48	250
16. Tallulah, La	9	40			65	200
17. Tallulah, La	4.5	40			65	200
18. Florence, S.C	13	38			65	200
19. Florence, S.C.[1]	5	40			65	200

[1] No insecticide treatments.

[2] Long staple cotton.

Results

Data are presented in tables 2–17 on the distribution of the following insect pests and damaged fruiting forms in various cottonfields:

Table	*Data on—*
2	Bollworm eggs.
3	Cabbage looper eggs.
4	Beet armyworm egg masses.
5	Salt-marsh caterpillar egg masses.
6	Bollworm larvae.
7	Bollworm-damaged fruiting forms.
8	Cabbage looper larvae.
9	Beet armyworm larvae.
10	Salt-marsh caterpillar larvae.
11	Pink bollworm larvae.
12	Pink bollworm exit holes in bolls.
13	Boll weevil adults.
14	Boll weevil feeding punctures.
15	Boll weevil egg punctures.
16	*Lygus* nymphs.
17	*Lygus* adults.

Discussion

The analysis of the data is continuing in an effort to establish the distribution of the various cotton insect pests. Ultimately the analysis should lead to a better insight into their distribution in the field and thereby result in improved sampling methods. Meanwhile the data are being made available to assist statisticians, biometricians, and entomologists in studying distributions of insect pests on crops with which they are concerned.

TABLE 2.—*Distribution of bollworm eggs on single plants selected at random in various cottonfields, 1967*

Field and date	Plants (number) with indicated number of eggs per plant								Mean	Variance
	0	1	2	3	4	5	6	7		
Field 3 (30 acres)										
June 20	98	2	0	0	0	0	0	0	0.0200	0.0196
June 26	116	1	0	0	0	0	0	0	.0085	.0085
June 29	107	3	0	0	0	0	0	0	.0273	.0265
July 6	114	1	0	0	0	0	0	0	.0087	.0086
July 14	109	1	0	0	0	0	0	0	.0091	.0090
July 24	112	5	1	1	0	0	0	0	.0840	.1442
Aug. 4	116	1	0	0	0	0	0	0	.0085	.0085
Aug. 21	35	2	0	0	0	0	0	0	.0541	.0511
Aug. 25	26	5	2	0	0	0	0	0	.2727	.3196
Aug. 31	41	6	2	0	0	0	0	0	.2041	.2441
Sept. 7	21	9	1	4	1	1	0	1	1.0263	2.6046
Sept. 12	33	6	2	0	0	0	0	0	.2439	.2820
Sept. 19	42	7	1	1	0	0	0	0	.2353	.3368
Sept. 25	54	5	2	0	0	0	0	0	.1475	.1913
Oct. 2	48	11	2	0	2	0	0	0	.3651	.6762
Oct. 9	19	11	10	4	1	0	0	0	1.0444	1.1980
Oct. 13	35	2	2	0	0	0	0	0	.1538	.2327
Oct. 19	37	1	0	0	0	0	0	0	.0263	.0256
Field 4 (75 acres)										
June 21	107	1	0	0	0				.0093	.0092
Aug. 1	98	2	0	0	0				.0200	.0196
Aug. 7	98	2	0	0	0				.0200	.0196
Aug. 28	25	2	1	0	1				.2759	.6825
Sept. 1	51	2	0	0	0				.0377	.0363
Sept. 8	44	7	2	0	0				.2075	.2399
Sept. 14	83	1	2	0	0				.0581	.1013
Sept. 20	85	2	0	0	0				.0230	.0225
Sept. 26	65	4	2	0	0				.1127	.1563
Oct. 4	85	4	0	1	0				.0778	.1384
Oct. 10	44	5	1	0	0				.1400	.1604

Field and date	Plants (number) with indicated number of eggs per plant				Mean	Variance
	0	1	2			
Field 5 (72 acres)						
June 22	85	1	0		0.0116	0.0115
June 30	98	3	0		.0297	.0288
July 5	98	3	0		.0297	.0288
July 21	99	1	0		.0100	.0099
Aug. 17	30	1	0		.0323	.0312
Aug. 23	36	1	2		.1282	.2143
Aug. 29	34	1	0		.0286	.0278
Sept. 5	27	3	1		.1613	.1998
Sept. 11	44	4	0		.0833	.0764
Sept. 15	61	3	0		.0469	.0447
Sept. 27	63	3	0		.0455	.0434
Oct. 5	86	6	1		.0860	.1001
Oct. 11	63	5	2		.1286	.1692
Oct. 17	68	1	0		.0145	.0143
	0	1	2	3		
Field 6 (61 acres)						
June 23	103	2	0	0	.0190	.0187
July 3	98	2	0	0	.0200	.0196
July 7	99	3	0	0	.0294	.0285
Aug. 18	35	3	0	0	.0789	.0727
Aug. 24	25	10	2	0	.3784	.3433
Aug. 30	42	2	1	0	.0889	.1254
Sept. 6	34	12	3	0	.3673	.3549
Sept. 13	54	1	0	0	.0182	.0179
Sept. 18	75	2	0	0	.0260	.0253
Sept. 28	73	5	0	0	.0641	.0600
Oct. 6	42	4	3	1	.2600	.4324
Oct. 12	92	3	0	0	.0316	.0306

TABLE 3.—*Distribution of cabbage looper eggs on single plants selected at random in various cottonfields, 1967*

Field and date	Plants (number) with indicated number of eggs per plant																Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	16	20		
Field 3 (30 acres)																		
July 10	114	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0172	0.0169
July 14	106	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0364	.0350
July 18	113	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0424	.0406
July 24	105	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	.1333	.1322
July 31	98	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	.1880	.2040
Aug. 4	88	12	8	5	2	1	0	1	0	0	0	0	0	0	0	0	.5385	1.3767
Aug. 9	96	11	8	3	1	1	0	0	0	0	0	0	0	0	0	0	.3750	.7844
Aug. 14	94	18	6	1	0	0	0	0	0	0	0	0	0	0	0	0	.2773	.3517
Aug. 21	2	1	4	3	8	3	1	2	4	0	2	3	2	0	1	1	6.2162	19.3046
Aug. 25	4	1	3	5	6	4	2	3	1	0	0	1	1	1	1	0	4.8182	13.9669
Aug. 31	36	6	4	2	0	0	1	0	0	0	0	0	0	0	0	0	.5306	1.2695
Sept. 7	25	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	.3947	.3442
Sept. 12	36	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	.1463	.1737
Sept. 19	50	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	.0588	.1730
Sept. 25	56	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	.1311	.2123
Oct. 2	33	18	8	2	1	1	0	0	0	0	0	0	0	0	0	0	.7778	1.1252
Oct. 9	17	18	7	2	1	0	0	0	0	0	0	0	0	0	0	0	.9333	.9067
Oct. 13	31	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.2051	.1631
Oct. 31	62	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0159	.0156

TABLE 3.—*Distribution of cabbage looper eggs on single plants selected at random in various cottonfields, 1967*—Continued

Field and date	Plants (number) with indicated number of eggs per plant																				Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	18	19	20			
Field 4 (*75 acres*)																						
July 12	103	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	0.0096	0.0095
July 19	91	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.1698	.1976
July 27	79	13	7	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.3465	.6225
Aug. 1	75	17	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	---	.5600	4.4264
Aug. 7	75	12	10	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.4200	.6836
Aug. 16	6	6	6	7	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	---	2.5429	3.6196
Aug. 22	5	3	3	5	3	3	5	4	0	1	1	1	0	0	0	1	0	0	0	---	4.4000	11.6686
Aug. 28	1	4	8	4	4	3	1	1	0	0	0	1	0	1	0	0	1	0	0	---	4.0690	14.8228
Sept. 1	35	9	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.3750	.4844
Sept. 8	34	12	4	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.5849	.9975
Sept. 14	84	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.0233	.0227
Sept. 20	86	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.0115	.0114
Sept. 26	63	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.1127	.1000
Oct. 4	80	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.1333	.1600
Oct. 10	47	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.0800	.1136
Oct. 16	60	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.0164	.0161
Oct. 26	62	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	.0159	.0156
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	18	19	20	25	26	27		
Field 5 (*72 acres*)																						
July 13	100	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0099	.0098
July 21	88	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.1400	.1604
July 26	85	10	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.2300	.4171
July 28	75	8	10	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.4900	.8699
Aug. 3	73	10	9	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.5400	1.0284
Aug. 10	72	14	7	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.4848	.8760
Aug. 17	6	8	6	8	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9355	2.4475
Aug. 23	3	1	2	2	4	4	5	4	2	3	2	1	1	1	1	0	1	1	0	1	7.5384	37.7296
Aug. 29	14	9	5	1	1	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1.6286	4.6906
Sept. 5	15	9	3	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1290	2.8221
Sept. 11	36	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.2917	.2899
Sept. 15	63	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0156	.0154
Sept. 21	62	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0313	.0303
Sept. 27	64	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0455	.0737
Oct. 5	80	11	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	.2258	.7985
Oct. 11	64	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0857	.0784
	0	1	2	3	4	5	6	7	8	9	10	11	12	17								
Field 6 (*61 acres*)																						
July 20	87	14	1	0	0	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.1569	.1519
July 25	85	11	4	1	0	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.2178	.3090
Aug. 2	77	8	8	6	0	0	0	1	0	0	0	0	0	0	---	---	---	---	---	---	.4900	1.1899
Aug. 8	75	10	8	3	4	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.5100	1.0699
Aug. 11	77	10	10	1	2	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.4100	.7419
Aug. 18	13	11	9	4	1	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	1.1842	1.2029
Aug. 24	3	4	3	7	3	5	3	2	2	2	1	0	1	1	---	---	---	---	---	---	4.6757	12.7597
Aug. 30	21	16	3	3	1	0	1	0	0	0	0	0	0	0	---	---	---	---	---	---	.9111	1.5477
Sept. 6	40	10	2	0	0	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.2692	.2737
Sept. 13	48	6	1	0	0	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.1455	.1607
Sept. 18	76	1	0	0	0	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.0130	.0128
Sept. 28	73	4	1	0	0	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.0769	.0966
Oct. 6	46	4	0	0	0	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.0800	.0736
Oct. 18	65	1	0	0	0	0	0	0	0	0	0	0	0	0	---	---	---	---	---	---	.0152	.0149

TABLE 4.—*Distribution of beet armyworm egg masses on single plants selected at random in various cottonfields, 1967*

Field and date	Plants (number) with indicated number of egg masses per plant			Mean	Variance
	0	1	2		
Field 3 (30 acres)					
July 31	116	1	0	0.0085	0.0085
Aug. 4	116	1	0	.0085	.0085
Aug. 21	35	2	0	.0541	.0511
Aug. 25	29	4	0	.1212	.1065
Aug. 31	43	5	1	.1429	.1633
Sept. 7	34	4	0	.1053	.0942
Sept. 12	38	2	1	.0976	.1368
Sept. 19	49	2	0	.0392	.0377
Sept. 25	60	1	0	.0164	.0161
Oct. 2	53	10	0	.1587	.1335
Oct. 13	38	1	0	.0256	.0250
Field 4 (75 acres)					
Sept. 1	51	2	0	.0377	.0363
Sept. 8	51	2	0	.0377	.0363
Sept. 20	82	4	1	.0690	.0872
	0	1			
Field 5 (72 acres)					
Aug. 23	36	3		0.0769	0.0710
Aug. 29	32	3		.0857	.0784
Sept. 5	30	1		.0323	.0312
Sept. 21	60	4		.0625	.0586
Sept. 27	65	1		.0152	.0149
Oct. 5	92	1		.0108	0106
	0	1	2		
Field 6 (61 acres)					
Aug. 18	36	2	0	.0526	.0499
Aug. 24	34	2	1	.1081	.1505
Aug. 30	42	3	0	.0667	.0622
Sept. 6	51	1	0	.0192	.0189
Sept. 22	71	1	0	.0139	.0137
Oct. 6	49	1	0	.0200	.0196

TABLE 5.—*Distribution of salt-marsh caterpillar egg masses on single plants selected at random in various cottonfields, 1967*

Field and date	Plants (number) with indicated number of egg masses per plant					Mean	Variance
	0	1	2	3			
Field 3 (30 acres)							
June 29	109	1	0	0		0.0091	0.0090
July 6	111	4	0	0		.0348	.0336
July 10	113	3	0	0		.0259	.0252
July 14	109	1	0	0		.0091	.0090
Aug. 21	34	2	1	0		.1081	.1505
Aug. 25	30	2	1	0		.1212	.1671
Aug. 31	46	3	0	0		.0612	.0575
Sept. 7	37	1	0	0		.0263	.0256
Sept. 12	38	2	1	0		.0976	.1368
Sept. 19	41	7	2	1		.2745	.3952
Sept. 25	60	1	0	0		.0164	.0161
	0	1	2	3	4		
Field 4 (75 acres)							
July 12	103	1	0	0	0	.0096	.0095
Aug. 16	32	2	0	0	1	.1714	.4849
Aug. 22	32	3	0	0	0	.0857	.0784
Aug. 28	24	4	1	0	0	.2069	.2331
Sept. 1	52	1	0	0	0	.0189	.0185
Sept. 20	84	3	0	0	0	.0345	.0333
Sept. 26	69	2	0	0	0	.0282	.0274
	0	1	2	3			
Field 5 (72 acres)							
July 5	98	3	0	0		0.0297	0.0288
July 28	99	1	0	0		.0100	.0099
Aug. 17	28	2	0	0		.2903	1.5609
Aug. 29	34	1	0	0		.0286	.0278
Sept. 5	30	1	0	0		.0323	.0312
Sept. 11	46	2	0	0		.0417	.0399
Sept. 15	62	2	0	0		.0313	.0303
Sept. 21	58	3	2	1		.1563	.2881
Sept. 27	65	1	0	0		.0152	.0149
Field 6 (61 acres)							
Aug. 11	96	3	1	0		.0500	.0675
Aug. 18	35	3	0	0		.0789	.0727
Aug. 24	35	2	0	0		.0541	.0511
Sept. 13	53	2	0	0		.0364	.0350
Sept. 18	70	6	0	1		.1169	.1811
Sept. 22	64	5	1	2		.1806	.3424
Sept. 28	76	2	0	0		.0256	.0250

TABLE 6.—*Distribution of bollworm larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit						Mean	Variance
	0	1	2	3	4	5		
Field 1								
(1 acre)[1]								
June 20:								
1	100	0	0	0	0	0	0	0
5	94	5	0	1	0	0	.0800	.1336
10	93	6	0	0	0	1	.1100	.2979
July 7:								
1	98	2	0	0	0	0	.0200	.0196
5	94	5	1	0	0	0	.0700	.0851
10	89	10	0	1	0	0	.1300	.1731
July 18:								
1	99	1	0	0	0	0	.0100	.0099
5	93	6	1	0	0	0	.0800	.0936
Aug. 1:								
1	100	0	0	0	0	0	0	0
5	97	3	0	0	0	0	.0300	.0291
Aug. 24:								
1	98	1	1	0	0	0	.0300	.0491
5	96	3	1	0	0	0	.0500	.0675
Sept. 14,								
1	91	5	4	0	0	0	.1300	.1931
Field 2								
(1 acre)[2]								
June 29:								
1	99	0	0	0	0	1	.0500	.2475
5	97	2	0	0	0	1	.0700	.2651
10	97	1	1	0	0	1	.0800	.2936
July 10:								
1	98	2	0	0	0	0	.0200	.0196
5	94	5	1	0	0	0	.0700	.0851
10	92	7	1	0	0	0	.0900	.1019
July 28:								
1	90	9	1	0	0	0	.1100	.1179
5	73	25	2	0	0	0	.2900	.2459
Aug. 8:								
1	86	14	0	0	0	0	.1400	.1204
5	52	30	14	4	0	0	.7000	.7300
Aug. 21:								
1	96	4	0	0	0	0	.0400	.0384
5	84	13	3	0	0	0	.1900	.2139
Sept. 19,								
1	88	11	1	0	0	0	.1300	.1331
Field 3								
(1 acre)								
June 12:								
1	100	0					0	0
5	99	1					.0100	.0099
10	97	3					.0300	.0291
20	94	6					.0600	.0564
June 21:								
1	100	0					0	0
5	100	0					0	0
10	98	2					.0200	.0196
July 25:								
1	99	1					.0100	.0099
5	95	5					.0500	.0475

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit				Mean	Variance
	0	1	2	3		
Field 3						
(30 acres)						
June 13:						
1	100	0	0	0	0	0
5	95	4	1	0	.0600	.0764
10	92	6	1	1	.1100	.1779
June 20:						
1	99	1	0	0	.0100	.0099
5	91	9	0	0	.0900	.0819
10	87	11	2	0	.1500	.1675
July 5:						
1	97	3	0	0	.0300	.0291
5	89	9	2	0	.1300	.1531
10	76	20	3	1	.2900	.3259
July 24:						
1	99	1	0	0	.0100	.0099
5	91	8	1	0	.1000	.1100
Aug. 10:						
1	98	2	0	0	.0200	.0196
5	90	10	0	0	.1000	.0900
10	85	14	1	0	.1600	.1544
Aug. 31:						
1	90	9	1	0	.1100	.1179
5	77	18	4	1	.2900	.3459
Field 4						
(1 acre)[3]						
June 14:						
1	100	0	0		0	0
5	99	1	0		.0100	.0099
10	96	3	1		.0500	.0675
20	94	3	3		.0900	.1419
July 19:						
1	99	1	0		.0100	.0099
5	94	6	0		.0600	.0564
Aug. 3:						
1	97	3	0		.0300	.0291
5	95	5	0		.0500	.0475
10	92	8	0		.0800	.0736
Aug. 18:						
1	100	0	0		0	0
5	98	2	0		.0200	.0196
Field 4						
(75 acres)[4]						
June 15:						
1	99	1	0		.0100	.0099
5	97	3	0		.0300	.0291
10	96	4	0		.0400	.0384
July 20:						
1	98	2	0		.0200	.0196
5	97	3	0		.0300	.0291
Aug. 4:						
1	96	4	0		.0400	.0384
5	90	6	4		.1400	.2004
Sept. 6:						
1	99	1	0		.0100	.0099
5	97	3	0		.0300	.0291

See footnotes at end of table.

Table 6.—*Distribution of bollworm larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit					Mean	Variance
	0	1	2	3	6		
Field 5 (72 acres)							
June 15:							
1	99	1	0	0	0	0.0100	0.0099
5	99	1	0	0	0	.0100	.0099
10	99	1	0	0	0	.0100	.0099
June 22:							
1	99	1	0	0	0	.0100	.0099
5	98	2	0	0	0	.0200	.0196
10	97	3	0	0	0	.0300	.0291
July 5:							
1	97	3	0	0	0	.0300	.0291
5	91	8	1	0	0	.1000	.1100
10	79	18	3	0	0	.2400	.2424
July 14:							
1	88	10	2	0	0	.1400	.1604
5	67	24	2	6	1	.5200	.9496
July 26:							
1	100	0	0	0	0	0	0
5	94	6	0	0	0	.0600	.0564
Aug. 11:							
1	98	2	0	0	0	.0200	.0196
5	89	9	2	0	0	.1300	.1531
Sept. 5:							
1	94	6	0	0	0	.0600	.0564
5	89	10	1	0	0	.1200	.1256
Field 6 (61 acres)							
June 13:							
1	98	2	0			.0200	.0196
5	97	3	0			.0300	.0291
10	96	4	0			.0400	.0384
June 23:							
1	100	0	0			0	0
5	100	0	0			0	0
10	99	1	0			.0100	.0099
July 3:							
1	99	1	0			.0100	.0099
5	99	1	0			.0100	.0099
10	95	3	2			.0700	.1051
July 21:							
1	100	0	0			0	0
5	97	3	0			.0300	.0291
Aug. 2:							
1	99	1	0			.0100	.0099
5	92	8	0			.0800	.0736
Aug. 23:							
1	100	0	0			0	0
5	98	2	0			.0200	.0196
Sept. 7:							
1	97	2	1			.0400	.0584
5	88	9	3			.1500	.1875

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit								Mean	Variance
	0	1	2	3	4	5	6	7		
Field 7 (1 acre) [5]										
July 27:										
1	73	23	2	1	0	1	0	0	.3500	.5275
5	40	27	9	11	6	3	2	2	1.4300	2.9851
Aug. 14:										
1	99	1	0	0	0	0	0	0	0.0100	0.0099
5	86	12	2	0	0	0	0	0	.1600	.1744
Sept. 13:										
1	100	0	0	0	0	0	0	0	0	0
5	95	5	0	0	0	0	0	0	.0500	.0475
Field 8 (1 acre) [6]										
June 16:										
1	100	0	0	0	0	0			0	0
5	99	1	0	0	0	0			.0100	.0099
10	98	2	0	0	0	0			.0200	.0196
20	98	2	0	0	0	0			.0200	.0196
July 13:										
1	100	0	0	0	0	0			0	0
5	99	1	0	0	0	0			.0100	.0099
10	96	4	0	0	0	0			.0400	.0384
July 31:										
1	94	6	0	0	0	0			.0600	.0564
5	83	13	3	0	1	0			.2300	.3571
10	75	18	5	1	0	1			.3600	.5904
Aug. 15:										
1	98	2	0	0	0	0			.0200	.0196
5	96	4	0	0	0	0			.0400	.0384
10	92	7	1	0	0	0			.0900	.1019
Sept. 18, 1	100	0	0	0	0	0			0	0
Field 9 (1 acre) [7]										
July 27:										
1	98	2	0	0	0	0			.0200	.0196
5	93	7	0	0	0	0			.0700	.0651
10	88	12	0	0	0	0			.1200	.1056
Aug. 7:										
1	94	5	1	0	0	0			.0700	.0851
5	87	10	3	0	0	0			.1600	.1944
Aug. 17:										
1	90	9	1	0	0	0			.1100	.1179
5	75	18	6	0	1	0			.3400	.4644
10	66	22	9	2	0	1			.5100	.7499
Aug. 28:										
1	98	2	0	0	0	0			.0200	.0196
5	89	10	1	0	0	0			.1200	.1256
10	89	9	2	0	0	0			.1300	.1531
Field 10 (1 acre)										
Aug. 29:										
1	100	0	0						0	0
5	98	2	0						.0200	.0196
10	90	8	2						.1200	.1456
Field 11 (1 acre)										
Aug. 21:										
1	100	0							0	0
5	99	1							.0100	.0099
10	99	1							.0100	.0099
Field 12 (1 acre) [8]										
Oct. 9:										
1	100	0							0	0
5	99	1							.0100	.0099

See footnotes at end of table.

TABLE 6.—*Distribution of bollworm larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit								Mean	Variance
	0	1	2	3	4	5	6	7		
Field 16 (1 acre)										
July 26:										
1	92	7	1	0	0	0	0	0	0.0900	0.1019
5	66	24	7	3	0	0	0	0	.4700	.5691
10	49	25	14	11	1	0	0	0	.9000	1.1500
20	38	29	15	7	8	1	1	1	1.3000	2.2100
Sept. 1:										
1	81	14	4	1	0	0	0	0	.2500	.3275
5	53	19	12	5	3	7	0	1	1.1200	2.5856
Field 17 (1 acre)										
July 31:										
1	99	1	0	0					0.0100	0.0099
5	98	1	0	1					.0400	.0984
10	94	2	3	1					.1100	.2179
20	91	4	3	2					.1600	.3144
Aug. 17:										
1	99	1	0	0					.0100	.0099
5	95	5	0	0					.0500	.0475

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[1] No larvae detected in 1-, 5-, 10-, and 20-plant units on June 6.

[2] No larvae detected in 1-, 5-, 10-, and 20-plant units on June 8 and 19.

[3] No larvae detected in 1-, 5-, and 10-plant units on June 23.

[4] No larvae detected in 1-, 5-, and 10-plant units on June 26.

[5] No larvae detected in 1-, 5-, 10-, and 20-plant units on June 27.

[6] No larvae detected in 1-, 5-, 10-, and 20-plant units on June 29.

[7] No larvae detected in 1-, 5-, 10-, and 20-plant units on July 12.

[8] No larvae detected in 1- and 5-plant units on Sept. 28, Oct. 2, and 4.

TABLE 7.—*Distribution of bollworm-damaged fruiting forms in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of damaged forms per unit								Mean	Variance
	0	1	2	3	4	5	6	7		
Field 1 (1 acre)										
June 6:										
1	100	0	0	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0	0	0
10	100	0	0	0	0	0	0	0	0	0
20	98	1	1	0	0	0	0	0	.0300	.0491
June 20:										
1	99	1	0	0	0	0	0	0	.0100	.0099
5	91	6	2	1	0	0	0	0	.1300	.2131
10	84	12	1	1	0	1	0	1	.2900	.9059
July 7:										
1	96	3	1	0	0	0	0	0	.0500	.0675
5	92	4	1	2	0	1	0	0	.1700	.4811
10	88	4	5	2	0	0	0	1	.2700	.8371
July 18:										
1	94	5	1	0	0	0	0	0	.0700	.0851
5	74	14	8	0	2	1	0	1	.5000	1.2700
Aug. 1:										
1	93	5	2	0	0	0	0	0	.0900	.1219
5	78	11	3	3	2	1	1	1	.5200	1.6496
Aug. 24:										
1	96	2	0	1	1	0	0	0	.0900	.2619
5	93	5	0	1	1	0	0	0	.1200	.2856
Sept. 14, 1	87	7	2	3	1	0	0	0	.2400	.5224

TABLE 7.—*Distribution of bollworm-damaged fruiting forms in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of damaged forms per unit																		Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	18	19	27		
Field 2 (1 acre)																				
June 8:																				
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June 19:																				
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June 29:																				
1	98	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	.1100	.8379
5	96	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	.1400	.8804
10	95	0	3	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	.2200	1.3716
July 10:																				
1	99	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0100	.0099
5	91	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.1100	.1379
10	87	6	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.2200	.3916
July 28:																				
1	79	12	5	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	.3960	.8729
5	44	18	11	7	7	2	3	2	3	1	0	2	0	0	0	0	0	0	1.8600	6.6204
Aug. 8:																				
1	65	19	10	6	0	0	1	0	0	1	0	0	0	0	0	0	0	0	.7059	1.7566
5	19	18	12	15	11	7	2	4	1	2	3	2	0	1	1	1	0	1	3.5600	17.3864
Aug. 21:																				
1	70	15	10	2	1	0	0	1	0	1	0	0	0	0	0	0	0	0	.6100	1.8179
5	35	19	13	10	4	7	6	1	1	2	0	0	1	0	0	0	1	0	2.2600	8.8524
Sept. 19, 1	70	13	9	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	.6000	1.2121
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	15					
Field 3 (1 acre)																				
June 12:																				
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0
5	94	5	1	0	0	0	0	0	0	0	0	0	0	0	0				.0700	.0851
10	93	4	2	0	0	1	0	0	0	0	0	0	0	0	0				.1300	.3531
20	89	2	5	3	0	1	0	0	0	0	0	0	0	0	0				.2600	.6724
June 21:																				
1	98	1	1	0	0	0	0	0	0	0	0	0	0	0	0				.0300	.0491
5	83	9	4	2	0	0	0	2	0	0	0	0	0	0	0				.3700	1.2731
10	76	10	5	4	2	0	0	2	0	1	0	0	0	0	0				.6300	2.3731
July 25:																				
1	97	1	1	0	1	0	0	0	0	0	0	0	0	0	0				.0700	.2051
5	87	7	2	2	1	1	0	0	0	0	0	0	0	0	0				.2600	.6724
Field 3 (30 acres)																				
June 13:																				
1	96	2	1	1	0	0	0	0	0	0	0	0	0	0	0				.0700	.1451
5	92	5	0	1	1	0	0	1	0	0	0	0	0	0	0				.1900	.7539
10	87	5	1	4	1	0	0	1	1	0	0	0	0	0	0				.3800	1.5956
June 20:																				
1	89	8	1	2	0	0	0	0	0	0	0	0	0	0	0				.1600	.2744
5	74	10	8	2	3	3	0	0	0	0	0	0	0	0	0				.5900	1.4819
10	62	13	12	3	2	3	3	1	1	0	0	0	0	0	0				1.0200	3.1196
July 5:																				
1	84	10	4	2	0	0	0	0	0	0	0	0	0	0	0				.2400	.3824
5	56	16	7	10	3	2	4	2	0	0	0	0	0	0	0				1.2000	3.3000
10	47	15	6	11	4	3	5	3	1	1	1	0	1	1	1				2.0900	9.5019
July 24:																				
1	91	5	2	2	0	0	0	0	0	0	0	0	0	0	0				.1500	.2875
5	73	10	11	4.	0	1	0	0	0	0	0	1	0	0	0				.6000	2.0000
Aug. 10:																				
1	96	3	1	0	0	0	0	0	0	0	0	0	0	0	0				.0500	.0675
5	77	14	3	3	3	0	0	0	0	0	0	0	0	0	0				.4100	.8419
10	61	18	11	3	3	1	1	1	1	0	0	0	0	0	0				.8700	2.3531
Aug. 31:																				
1	80	14	3	2	1	0	0	0	0	0	0	0	0	0	0				.3000	.5100
5	51	18	11	9	3	4	2	1	1	0	0	0	0	0	0				1.2600	3.1724

TABLE 7.—*Distribution of bollworm-damaged fruiting forms in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of damaged forms per unit													Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	18		
Field 4 (*1 acre*)[1]															
June 14:															
1	98	1	1	0	0	0	0	0	0	0	0	0	0	0.0300	0.0491
5	92	5	2	1	0	0	0	0	0	0	0	0	0	.1900	.6739
10	86	9	3	2	0	0	0	0	0	0	0	0	0	.2200	.3516
20	79	13	5	2	1	0	0	0	0	0	0	0	0	.4400	1.1064
July 19:															
1	85	9	2	1	2	0	0	1	0	0	0	0	0	.3100	.9139
5	69	6	6	5	2	2	2	3	2	0	0	2	1	1.4000	7.3600
Aug. 3:															
1	97	2	0	1	0	0	0	0	0	0	0	0	0	.0500	.1075
5	90	5	4	1	0	0	0	0	0	0	0	0	0	.1900	.3539
10	88	5	3	4	0	0	0	0	0	0	0	0	0	.2500	.4475
Aug. 18:															
1	98	0	2	0	0	0	0	0	0	0	0	0	0	.0400	.0784
5	92	5	1	1	0	0	1	0	0	0	0	0	0	.1600	.5144

Field, date, and plants per unit	0	1	2	3	4	5	6	7	8	9	10	11	13	Mean	Variance
Field 4 (*75 acres*)															
June 15:															
1	97	1	0	1	0	0	0	1	0	0	0	0	0	.0404	.0994
5	95	2	1	0	1	0	0	0	1	0	0	0	0	.1600	.8344
10	91	4	1	0	1	1	0	0	1	1	0	0	0	.3200	1.8376
June 26:															
1	99	1	0	0	0	0	0	0	0	0	0	0	0	.0100	.0099
5	99	0	0	1	0	0	0	0	0	0	0	0	0	.0400	.0984
10	97	0	0	2	1	0	0	0	0	0	0	0	0	.1100	.2979
July 20:															
1	88	5	3	4	0	0	0	0	0	0	0	0	0	.2300	.3971
5	80	4	4	2	1	2	1	3	0	1	0	1	1	.9200	4.8536
Aug. 4:															
1	89	8	2	1	0	0	0	0	0	0	0	0	0	.1500	.2075
5	79	9	1	7	1	1	0	2	0	0	0	0	0	.5500	1.6875
Sept. 6:															
1	96	4	0	0	0	0	0	0	0	0	0	0	0	.0400	.0384
5	92	5	2	0	0	0	0	1	0	0	0	0	0	.1600	.5944

Field, date, and plants per unit	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	20	21	Mean	Variance
Field 5 (*72 acres*)																					
June 15:																					
1	98	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0200	.0196
5	97	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0400	.0584
10	97	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0600	.1364
June 22:																					
1	98	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0400	.0984
5	91	3	1	4	0	0	0	0	9	0	0	0	1	0	0	0	0	0	0	.2900	1.7859
10	89	2	2	4	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	.4000	2.2400
July 5:																					
1	96	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0400	.0384
5	87	5	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.2800	.6816
10	70	12	7	6	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	.6600	1.4844
July 14:																					
1	71	9	7	2	4	3	0	2	1	0	0	0	1	0	0	0	0	0	0	.9400	4.1164
5	41	12	5	8	8	2	3	7	3	2	0	1	0	1	1	2	2	1	1	3.4000	22.8600
July 26:																					
1	98	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0300	.0491
5	86	8	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.2300	.4371
Aug. 11:																					
1	96	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0800	.1936
5	87	3	2	5	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	.4300	1.9851
Sept. 5:																					
1	88	9	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.1600	.2344
5	80	12	4	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	.3700	.9731

See footnotes at end of table.

Table 7.—*Distribution of bollworm-damaged fruiting forms in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of damaged forms per unit								Mean	Variance
	0	1	2	3	4	5	6	7		
Field 6 *(61 acres)*										
June 13:										
1	96	2	0	0	1	1	0	0	0. 1100	0. 4179
5	94	4	0	0	1	0	0	1	. 1500	. 6675
10	91	5	1	0	1	1	0	1	. 2300	. 9371
June 23:										
1	99	0	1	0	0	0	0	0	. 0200	. 0396
5	97	1	1	1	0	0	0	0	. 0600	. 1364
10	93	2	2	3	0	0	0	0	. 1500	. 3475
July 3:										
1	100	0	0	0	0	0	0	0	0	0
5	99	1	0	0	0	0	0	0	. 0100	. 0099
10	96	1	1	1	1	0	0	0	. 1000	. 2900
July 21:										
1	88	9	1	2	0	0	0	0	. 1700	. 2811
5	75	15	5	3	0	1	1	0	. 4500	1. 0275
Aug. 2:										
1	99	0	0	1	0	0	0	0	. 0300	. 0891
5	91	4	1	1	2	1	0	0	. 2200	. 6916
Aug. 23:										
1	98	2	0	0	0	0	0	0	. 0200	. 0196
5	83	12	2	1	1	1	0	0	. 2800	. 6216
Sept. 7:										
1	91	8	1	0	0	0	0	0	. 1000	. 1100
5	79	15	3	3	0	0	0	0	. 3000	. 4500

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	26		
Field 7 *(1 acre)*																								
June 27:																								
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July 27:																								
1	47	22	10	6	9	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1. 3000	2. 8700
5	27	6	4	7	12	4	4	5	7	1	3	0	4	4	2	2	1	1	0	2	3	1	5. 7200	35. 6016
Aug. 14:																								
1	85	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 1800	. 2076
5	49	22	14	5	3	2	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1. 2000	2. 9800
Sept. 13:																								
1	99	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0200	. 0396
5	93	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0900	. 1219
Field 8 *(1 acre)*																								
June 16:																								
1	100	0	0	0	0	0	0	0	0	0	0	0											0	0
5	100	0	0	0	0	0	0	0	0	0	0	0											0	0
10	100	0	0	0	0	0	0	0	0	0	0	0											0	0
20	100	0	0	0	0	0	0	0	0	0	0	0											0	0
June 29:																								
1	100	0	0	0	0	0	0	0	0	0	0	0											0	0
5	100	0	0	0	0	0	0	0	0	0	0	0											0	0
10	100	0	0	0	0	0	0	0	0	0	0	0											0	0
July 13:																								
1	100	0	0	0	0	0	0	0	0	0	0	0											0	0
5	99	1	0	0	0	0	0	0	0	0	0	0											. 0100	. 0099
10	98	1	0	1	0	0	0	0	0	0	0	0											. 0400	. 0984
July 31:																								
1	87	10	1	2	0	0	0	0	0	0	0	0											. 1800	. 2876
5	64	16	10	3	3	0	2	0	1	1	0	0											. 8600	2. 7404
10	46	14	14	7	8	3	2	3	2	0	0	1											1. 7000	5. 1500

TABLE 7.—*Distribution of bollworm-damaged fruiting forms in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of damaged forms per unit												Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11		
Field 8 *(1 acre)*—Con.														
Aug. 15:														
1	95	4	1	0	0	0	0	0	0	0	0	0	0. 0600	0. 0764
5	86	10	4	0	0	0	0	0	0	0	0	0	. 1800	. 2276
10	84	12	3	0	1	0	0	0	0	0	0	0	. 2200	. 3516
Sept. 18, 1	100	0	0	0	0	0	0	0						
Field 9 *(1 acre)*														
July 12:														
1	100	0	0	0	0	0	0	0	0	0	0		0	0
5	100	0	0	0	0	0	0	0	0	0	0		0	0
10	100	0	0	0	0	0	0	0	0	0	0		0	0
20	100	0	0	0	0	0	0	0	0	0	0		0	0
July 27:														
1	94	3	2	1	0	0	0	0	0	0	0		. 1000	. 1900
5	80	12	4	3	1	0	0	0	0	0	0		. 3300	. 6011
10	64	19	6	5	5	1	0	0	0	0	0		. 7100	1. 4259
Aug. 7:														
1	81	9	5	3	2	0	0	0	0	0	0		. 3600	. 7504
5	54	20	10	6	3	4	2	0	1	0	0		1. 1000	2. 7700
Aug. 17:														
1	85	11	1	3	0	0	0	0	0	0	0		. 2200	. 3716
5	62	14	13	6	3	1	0	1	0	0	0		. 8200	1. 7476
10	46	20	16	6	4	2	1	1	2	1	1		1. 4400	4. 3864
Aug. 28:														
1	93	6	1	0	0	0	0	0	0	0	0		. 0800	. 0936
5	63	21	13	2	1	0	0	0	0	0	0		. 5700	. 7451
10	54	20	12	10	0	2	2	0	0	0	0		. 9600	1. 8784
Field 10 *(1 acre)*														
Aug. 29:														
1	95	5	0	0	0								. 0500	. 0475
5	85	12	3	0	0								. 1800	. 2076
10	74	17	8	0	1								. 3700	. 5131
Field 11 *(1 acre)*														
Aug. 21:														
1	99	1	0	0	0	0							. 0100	. 0099
5	88	9	2	1	0	0							. 1600	. 2344
10	86	9	4	0	0	1							. 2200	. 4516
Field 12 *(1 acre)*														
Sept. 28:														
1	99	1	0	0									. 0100	. 0099
5	99	1	0	0									. 0100	. 0099
Oct. 2:														
1	99	1	0	0									. 0100	. 0099
5	98	2	0	0									. 0200	. 0197
Oct. 4:														
1	100	0	0	0									0	0
5	99	1	0	0									. 0100	. 0099
Oct. 9:														
1	99	1	0	0									. 0100	. 0099
5	93	3	2	2									. 1300	. 2758
Field 15 *(1 acre)* [2]														
June 22:														
1	100	0	0	0	0								0	0
5	94	5	1	0	0								. 0700	. 0851
10	91	8	0	0	1								. 1200	. 2256
20	84	12	2	1	1								. 2300	. 3971

See footnotes at end of table.

TABLE 7.—*Distribution of bollworm-damaged fruiting forms in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of damaged forms per unit																	Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Field 16 (1 acre)																			
July 26:																			
1	68	22	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0. 4300	0. 4851
5	13	23	27	19	7	7	1	3	0	0	0	0	0	0	0	0	0	2. 2400	2. 7024
10	5	12	16	14	19	11	5	10	3	2	0	2	1	0	0	0	0	3. 9300	6. 4651
20	2	3	9	6	9	10	10	12	15	6	4	5	5	0	2	1	1	6. 5700	11. 6251
Sept. 1:																			
1	53	21	8	8	6	3	1	0	0	0	0	0	0	0	0	0	0	1. 0600	2. 1964
5	19	14	8	10	8	11	4	9	5	2	4	2	3	1	0	0	0	4. 0300	12. 2491
Field 17 (1 acre)																			
July 31:																			
1	90	7	3	0	0	0	0	0										. 1300	. 1731
5	75	20	4	1	0	0	0	0										. 3100	. 3539
10	60	17	17	4	1	1	0	0										. 7200	1. 1016
20	46	18	15	12	6	1	1	1										1. 2600	2. 3324
Aug. 17:																			
1	88	9	2	1	0	0	0	0										. 1600	. 2344
5	80	13	4	2	1	0	0	0										. 3100	. 5339

[1] No damage detected in 1-, 5-, and 10-plant units on June 23.

[2] No *larvae* detected in 1-, 5-, 10-, and 20-plant units on June 22.

TABLE 8.—*Distribution of cabbage looper larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit																									Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	21	23	25	26	27	44		
Field 1 (1 acre) [1]																											
June 7:																											
1	95	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0. 0600	0. 0764
5	87	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 1700	. 2211
10	74	18	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 3500	. 4275
20	49	24	14	6	1	3	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1. 1100	2. 6779
July 7:																											
1	98	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0200	. 0196
5	98	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0200	. 0196
10	97	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0300	. 0291
July 18:																											
1	97	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0300	. 0291
5	93	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0900	. 1219
Aug. 1:																											
1	51	14	7	8	7	5	3	2	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1. 6600	5. 7844
5	17	11	4	4	8	7	5	4	2	2	1	4	6	5	3	1	2	2	3	4	1	1	1	1	1	7. 9000	63. 9292
Aug. 24:																											
1	92	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0800	. 0736
5	67	14	12	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 6000	. 9600

Field, date, and plants per unit	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	31	Mean	Variance
Field 2 (1 acre) [2]																			
June 8:																			
1	99	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0100	. 0099
5	98	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0200	. 0196
10	97	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0300	. 0291
20	93	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0800	. 0936
June 19:																			
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	99	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0100	. 0099
July 10:																			
1	94	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0900	. 1619
5	78	13	3	3	1	2	0	0	0	0	0	0	0	0	0	0	0	. 4200	1. 0036
10	63	14	12	5	3	0	2	0	1	0	0	0	0	0	0	0	0	. 8500	2. 1875
July 28:																			
1	74	12	6	4	2	0	2	0	0	0	0	0	0	0	0	0	0	. 5600	1. 4464
5	47	9	9	4	3	1	2	2	7	3	2	5	4	0	0	2	0	3. 1800	18. 3476
Aug. 8:																			
1	63	15	11	7	2	1	0	0	0	1	0	0	0	0	0	0	0	. 8000	1. 9600
5	28	15	8	9	9	6	6	6	2	3	1	1	3	2	0	0	1	3. 5900	19. 6619
Aug. 21:																			
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	98	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0300	. 0491

See footnotes at end of table.

TABLE 8.—*Distribution of cabbage looper larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit				Mean	Variance
	0	1	2	3		
Field 3 (1 acre)						
June 12:						
1	98	2	0	0	0.0200	0.0196
5	97	2	1	0	.0400	.0584
10	95	3	2	0	.0700	.1051
20	86	10	4	0	.1800	.2276
June 21:						
1	99	1	0	0	.0100	.0099
5	99	1	0	0	.0100	.0099
10	97	1	1	1	.0600	.1374
July 25:						
1	96	4	0	0	.0400	.0384
5	76	14	8	2	.3600	.5104

	0	1	2	3	4	5		
Field 3 (30 acres)								
June 13:								
1	100	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0
10	98	2	0	0	0	0	.0200	.0196
June 20:								
1	98	2	0	0	0	0	.0200	.0196
5	95	5	0	0	0	0	.0500	.0475
10	92	8	0	0	0	0	.0800	.0736
July 5:								
1	99	1	0	0	0	0	.0100	.0099
5	90	10	0	0	0	0	.1000	.0900
10	82	16	2	0	0	0	.2000	.2000
July 24:								
1	95	3	2	0	0	0	.0700	.1051
5	85	8	3	3	0	1	.2800	.6416
Aug. 10:								
1	98	2	0	0	0	0	.0200	.0196
5	89	9	1	1	0	0	.1400	.2004
10	82	15	2	0	1	0	.2300	.3371
Aug. 31:								
1	95	4	1	0	0	0	.0600	.0764
5	82	12	5	0	1	0	.2600	.4124

	0	1	2	3	4	5	6	7		
Field 4 (1 acre) [3]										
June 14:										
1	100	0	0	0	0	0	0	0	0	0
5	98	2	0	0	0	0	0	0	.0200	.0196
10	96	3	1	0	0	0	0	0	.0500	.0675
20	95	4	1	0	0	0	0	0	.0600	.0764
July 19:										
1	99	1	0	0	0	0	0	0	.0100	.0099
5	97	3	0	0	0	0	0	0	.0300	.0291
Aug. 3:										
1	87	12	1	0	0	0	0	0	.1400	.1404
5	65	24	11	5	2	0	0	0	.6449	.9393
10	48	20	10	7	5	7	2	1	1.3500	3.1675
Aug. 18:										
1	89	7	4	0	0	0	0	0	.1500	.2075
5	65	18	13	4	0	0	0	0	.5600	.7464

	0	1	2	3	4	5	6	7	8	13	14	15		
Field 4 (75 acres)														
June 15:														
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0
5	96	4	0	0	0	0	0	0	0	0	0	0	.0400	.0384
10	96	4	0	0	0	0	0	0	0	0	0	0	.0400	.0384
June 26:														
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0	0	0	0	0	0	0
10	99	1	0	0	0	0	0	0	0	0	0	0	.0100	.0099
July 20:														
1	98	2	0	0	0	0	0	0	0	0	0	0	.0200	.0196
5	95	5	0	0	0	0	0	0	0	0	0	0	.0500	.0475
Aug. 4:														
1	71	18	9	2	0	0	0	0	0	0	0	0	.4200	.5436
5	27	25	15	10	6	6	3	3	2	1	1	1	2.3600	8.3704
Sept. 6:														
1	92	7	1	0	0	0	0	0	0	0	0	0	.0900	.1019
5	81	15	4	0	0	0	0	0	0	0	0	0	.2300	.2571
Field 5 (72 acres) [4]														
June 22:														
1	100	0	0	0	0	0	0	0					0	0
5	100	0	0	0	0	0	0	0					0	0
10	99	1	0	0	0	0	0	0					.0100	.0099

See footnotes at end of table.

TABLE 8.—*Distribution of cabbage looper larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit													Mean	Variance
	0	1	2	3	4	5	6	7							
Field 5 (72 acres)[4]—Continued															
July 5:															
1	96	4	0	0	0	0	0	0						0.0400	0.0384
5	95	5	0	0	0	0	0	0						.0500	.0475
10	92	7	0	1	0	0	0	0						.1000	.1500
July 14:															
1	96	4	0	0	0	0	0	0						.0400	.0384
5	89	11	0	0	0	0	0	0						.1100	.0979
July 26:															
1	89	11	0	0	0	0	0	0						.1100	.0979
5	62	26	7	4	1	0	0	0						.5600	.7464
Aug. 11:															
1	81	14	3	2	0	0	0	0						.2600	.3724
5	41	24	18	7	2	4	3	1						1.3400	2.6844
Sept. 5:															
1	90	9	1	0	0	0	0	0						.1100	.1179
5	71	22	3	3	1	0	0	0						.4100	.6019
	0	1	2	3	4	5	6	7	8						
Field 6 (61 acres)[5]															
June 23:															
1	100	0	0	0	0	0	0	0	0					0	0
5	99	1	0	0	0	0	0	0	0					.0100	.0099
10	99	1	0	0	0	0	0	0	0					.0100	.0099
July 3:															
1	100	0	0	0	0	0	0	0	0					0	0
5	100	0	0	0	0	0	0	0	0					0	0
10	98	2	0	0	0	0	0	0	0					.0200	.0196
July 21:															
1	98	2	0	0	0	0	0	0	0					.0200	.0196
5	97	3	0	0	0	0	0	0	0					.0300	.0291
Aug. 2:															
1	78	14	7	1	0	0	0	0	0					.3100	.4139
5	53	20	14	4	6	1	1	0	1					1.0300	2.2691
Aug. 23:															
1	86	13	1	0	0	0	0	0	0					.1500	.1475
5	66	24	5	4	0	0	0	0	0					.4646	.5922
Sept. 7:															
1	94	5	1	0	0	0	0	0	0					.0700	.0851
5	79	14	5	1	1	0	0	0	0					.3100	.4939
Field 7 (1 acre)[6]															
July 27:															
1	99	1	0	0	0									.0100	.0099
5	98	2	0	0	0									.0200	.0196
Aug. 14:															
1	93	6	1	0	0									.0800	.0936
5	64	23	9	3	1									.5400	.7284
Field 8 (1 acre)[7]															
July 31:															
1	95	5	0	0	0	0								.0500	.0475
5	77	18	2	3	0	0								.3100	.4339
10	65	24	4	5	2	0								.5500	.8675
Aug. 15:															
1	92	8	0	0	0	0								.0800	.0736
5	70	19	10	0	0	1								.4400	.6464
10	56	28	9	4	2	1								.7100	1.0659
	0	1	2	3	4	5	6	7	8	9	13	14	15		
Field 9 (1 acre)															
July 12:															
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	99	1	0	0	0	0	0	0	0	0	0	0	0	.0100	.0099
10	99	1	0	0	0	0	0	0	0	0	0	0	0	.0100	.0099
20	99	1	0	0	0	0	0	0	0	0	0	0	0	.0100	.0099
July 27:															
1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	95	5	0	0	0	0	0	0	0	0	0	0	0	.0500	.0475
10	89	11	0	0	0	0	0	0	0	0	0	0	0	.1100	.0979
Aug. 7:															
1	99	1	0	0	0	0	0	0	0	0	0	0	0	.0100	.0099
5	89	8	2	1	0	0	0	0	0	0	0	0	0	.1500	.2275
Aug. 17:															
1	77	20	3	0	0	0	0	0	0	0	0	0	0	.2600	.2524
5	38	29	16	8	4	2	2	0	1	0	0	0	0	1.3100	2.4339
10	28	16	16	11	8	8	2	3	2	3	1	1	1	2.7100	9.5259
Aug. 28:															
1	99	1	0	0	0	0	0	0	0	0	0	0	0	.0100	.0099
5	98	2	0	0	0	0	0	0	0	0	0	0	0	.0200	.0196
10	98	2	0	0	0	0	0	0	0	0	0	0	0	.0200	.0196

See footnotes at end of table.

TABLE 8.—*Distribution of cabbage looper larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit								Mean	Variance
	0	1	2	3	4	5	6	7		
Field 10 (1 acre)										
Aug. 29:										
1	94	5	1	0	0	0	0	0	0.0700	0.0851
5	80	17	3	0	1	1	0	0	.3137	.5879
10	63	22	6	3	3	2	0	1	.7200	1.6816
Field 11 (1 acre)										
Aug. 21:										
1	95	5	0						.0500	.0475
5	91	9	0						.0900	.0819
10	90	9	1						.1100	.1179
Field 12 (1 acre)										
Sept. 28:										
1	100								0	0
5	100								0	0
Oct. 2:										
1	100								0	0
5	100								0	0
Oct. 4:										
1	100								0	0
5	100								0	0
Oct. 9, 1	100								0	0

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[1] No larvae detected in 1- or in 1-, 5-, and 10-plant units on Sept. 14 and on June 28, respectively.
[2] No larvae detected in 1- or in 1-, 5-. and 10-plant units on Sept. 19 and on June 29, respectively.
[3] No larvae detected in 1-, 5-, and 10-plant units on June 23.
[4] No larvae detected in 1-, 5-, and 10-plant units on June 15.
[5] No larvae detected in 1-, 5-, and 10-plant units on June 13.
[6] No larvae detected in 1- and 5- or in 1-, 5-, 10-, and 20-plant units on Sept. 13 and on June 27, respectively.
[7] No larvae detected in 1-, in 1-, 5-, and 10-, or in 1-, 5-, 10-, and 20-plant units on Sept. 18, on June 29 and July 13, and on June 16, respectively.

TABLE 9.—*Distribution of beet armyworm larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit			Mean	Variance
	0	1	2		
Field 1 (1 acre) [1]					
June 7:					
1	100	0		0	0
5	100	0		0	0
10	100	0		0	0
20	99	1		.0100	.0099
July 18:					
1	99	1		.0100	.0099
5	99	1		.0100	.0099
Aug. 1:					
1	99	1		.0100	.0099
5	96	4		.0400	.0384
Aug. 24:					
1	100	0		0	0
5	98	2		.0200	.0196
Sept. 14, 1	94	6		.0600	.0564
Field 2 (1 acre) [2]					
June 19:					
1	99	1	0	.0100	.0099
5	98	2	0	.0200	.0196
10	98	2	0	0.0200	0.0196
20	98	2	0	.0200	.0196
June 29:					
1	99	1	0	.0100	.0099
5	99	1	0	.0100	.0099
10	98	2	0	.0200	.0196
July 28:					
1	99	1	0	.0100	.0099
5	92	7	1	.0900	.1019
Aug. 8:					
1	97	3	0	.0300	.0291
5	93	7	0	.0700	.0651
Aug. 21:					
1	100	0	0	0	0
5	99	1	0	.0100	.0099
Sept. 19, 1	97	3	0	.0300	.0291
Field 3 (1 acre)					
June 12:					
1	100			0	0
5	100			0	0
10	100			0	0
20	100			0	0

See footnotes at end of table.

TABLE 9.—*Distribution of beet armyworm larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit	Mean	Variance
	0		
Field 3 (1 acre)—Con.			
June 21:			
1	100	0	0
5	100	0	0
10	100	0	0
July 25:			
1	100	0	0
5	100	0	0

Field, date, and plants per unit	0	1	Mean	Variance
Field 3 (30 acres) [3]				
Aug. 31:				
1	100	0	0	0
5	99	1	.0100	.0099

Field, date, and plants per unit	0	1	6	Mean	Variance
Field 4 (1 acre)[4]					
June 23:					
1	100	0	0	0	0
5	99	0	1	.0600	.3564
10	98	1	1	.0700	.3651
Field 4 (75 acres)[5]					
June 15:					
1	100	0		0	0
5	99	1		.0100	.0099
10	99	1		.0100	.0099
June 26:					
1	99	1		.0100	.0099
5	98	2		.0200	.0196
10	98	2		.0200	.0196
Field 5 (72 acres)[6]					
June 22:					
1	100	0	0	0	0
5	99	1	0	.0100	.0099
10	98	1	1	.0700	.3651
July 5:					
1	100	0	0	0	0
5	99	1	0	.0100	.0099
10	99	1	0	.0100	.0099
July 14:					
1	100	0	0	0	0
5	99	1	0	.0100	.0099
July 26:					
1	100	0	0	0	0
5	99	1	0	.0100	.0099
Field 6 (61 acres)[7]					
June 23:					
1	100	0		0	0
5	99	1		.0100	.0099
10	99	1		.0100	.0099

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit			Mean	Variance
	0	1	2		
Field 7 (1 acre)					
June 27:					
1	99	1	0	0.0100	0.0099
5	99	1	0	.0100	.0099
10	98	2	0	.0200	.0196
20	98	2	0	.0200	.0196
July 27:					
1	100	0	0	0	0
5	97	3	0	.0300	.0291
Aug. 14:					
1	100	0	0	0	0
5	97	1	2	.0500	.0875
Sept. 13:					
1	99	1	0	.0100	.0099
5	99	1	0	.0100	.0099

Field, date, and plants per unit	0	1	7	8	9	Mean	Variance
Field 8 (1 acre) [8]							
June 16:							
1	100	0	0	0	0	0	0
5	99	1	0	0	0	.0100	.0099
10	99	0	1	0	0	.0700	.4851
20	97	2	0	0	1	.1100	.8179
July 13:							
1	100	0	0	0	0	0	0
5	98	2	0	0	0	.0200	.0196
10	97	3	0	0	0	.0300	.0291
July 31:							
1	100	0	0	0	0	0	0
5	100	0	0	0	0	0	0
10	99	1	0	0	0	.0100	.0099
Aug. 15:							
1	100	0	0	0	0	0	0
5	99	1	0	0	0	.0100	.0099
10	99	1	0	0	0	.0100	.0099
Field 9 (1 acre) [9]							
Aug. 17:							
1	100	0				0	0
5	100	0				0	0
10	99	1				.0100	.0099
Aug. 28:							
1	99	1				.0100	.0099
5	99	1				.0100	.0099
10	99	1				.0100	.0099
Field 10 (1 acre)							
Aug. 29:							
1	100					0	0
5	100					0	0
10	100					0	0

See footnotes at end of table.

TABLE 9.—*Distribution of beet armyworm larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit	Mean	Variance
	0		
Field 11 (*1 acre*)			
Aug. 21:			
1	100	0	0
5	100	0	0
10	100	0	0

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit		Mean	Variance
	0	1		
Field 12 (*1 acre*) [10]				
Oct. 4:				
1	100	0	0	0
5	99	1	.0100	.0099

[1] No larvae detected in 1-, 5-, and 10-plant units on June 28 and July 7.

[2] No larvae detected in 1-, 5-, and 10- or in 1-, 5-, 10-, and 20-plant units on July 10 and on June 8, respectively.

[3] No larvae detected in 1- and 5- or in 1-, 5-, and 10-plant units on July 24 and on June 13, 20, July 5, and Aug. 10, respectively.

[4] No larvae detected in 1- and 5-, in 1-, 5-, and 10-, or in 1-, 5-, 10-, and 20-plant units on July 19 and Aug. 18, on Aug. 3, and on June 14, respectively.

[5] No larvae detected in 1- and 5-plant units on July 20, Aug. 4, and Sept. 6.

[6] No larvae detected in 1- and 5- or in 1-, 5-, and 10-plant units on Aug. 11 and Sept. 5 and on June 15, respectively.

[7] No larvae detected in 1- and 5- or in 1-, 5-, and 10-plant units on July 21, Aug. 2, 23, and Sept. 7 and on June 13 and July 3, respectively.

[8] No larvae detected in 1- or in 1-, 5-, and 10-plant units on Sept. 18 and on June 29, respectively.

[9] No larvae detected in 1- and 5-, in 1-, 5-, and 10-, or in 1-, 5-, 10-, and 20-plant units on Aug. 7, on July 27, and on July 12, respectively.

[10] No larvae detected in 1- and 5-plant units on Sept. 28, Oct. 2, and 9.

TABLE 10.—*Distribution of salt-marsh caterpillar larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit									Mean	Variance
	0	1	2	3	4	5	6	9	18		
Field 1 (*1 acre*) [1]											
June 28:											
1	98	2	0	0	0	0	0	0	0	0.0200	0.0196
5	93	6	1	0	0	0	0	0	0	.0800	.8859
10	85	14	0	1	0	0	0	0	0	.1700	.2011
July 7:											
1	97	3	0	0	0	0	0	0	0	.0300	.0291
5	92	7	1	0	0	0	0	0	0	.0900	.1019
10	82	17	1	0	0	0	0	0	0	.1900	.1739
July 18:											
1	100	0	0	0	0	0	0	0	0	0	0
5	96	3	1	0	0	0	0	0	0	.0500	.0675
Aug. 24:											
1	82	14	2	0	1	1	0	0	0	.2700	.5571
5	56	22	13	1	1	2	1	3	1	1.1600	6.1744

Field, date, and plants per unit						Mean	Variance
	0	1	2	5	8		
Field 2 (*1 acre*) [2]							
July 10:							
1	98	2	0	0	0	.0200	.0196
5	94	5	1	0	0	.0700	.0851
10	89	8	2	1	0	.4200	8.9836
July 28:							
1	99	1	0	0	0	.0100	.0099
5	95	5	0	0	0	.0500	.0475
Aug. 8:							
1	98	2	0	0	0	.0200	.0196
5	93	5	1	0	1	.1530	.7289

See footnotes at end of table.

TABLE 10.—*Distribution of salt-marsh caterpillar larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit						Mean	Variance
	0	1						
Field 3 (1 acre)								
July 25:								
1	97	3					0.0300	0.0291
5	95	5					.0500	.0475
	0	1	2	9				
Field 3 (30 acres) [3]								
July 5:								
1	99	1	0	0			.0100	.0099
5	97	2	1	0			.0400	.0584
10	94	4	1	1			.1500	.8675
July 24:								
1	100	0	0	0			0	0
5	95	5	0	0			.0500	.0475
	0	1	2	3				
Field 4 (1 acre) [4]								
June 14:								
1	100	0	0	0			0	0
5	100	0	0	0			0	0
10	99	0	0	1			.0300	.0891
20	99	0	0	1			.0300	.0891
July 19:								
1	96	4	0	0			.0400	.0384
5	91	6	2	1			.1300	.2131
	0	1	2	3	4	5		
Field 4 (75 acres) [5]								
June 15:								
1	100	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0
10	99	1	0	0	0	0	.0100	.0099
July 20:								
1	92	8	0	0	0	0	.0800	.0736
5	76	17	3	2	1	1	.3800	.7356
Field 5 (72 acres) [6]								
July 5:								
1	99	0	0	1	0		.0300	.0891
5	99	0	0	1	0		.0300	.0891
10	97	2	0	1	0		.0500	.1085
July 14:								
1	98	2	0	0	0		.0200	.0196
5	88	7	1	3	1		.2200	.4916
July 26:								
1	99	1	0	0	0		.0100	.0099
5	91	8	0	1	0		.1100	.1579
	0	1	2	3	4	10		
Field 6 (61 acres) [7]								
June 23:								
1	100	0	0	0	0	0	0	0
5	99	0	0	0	0	1	.1000	.9900
10	99	0	0	0	0	1	.1000	.9900
July 21:								
1	98	0	1	0	1	0	.0600	.1964
5	97	0	1	0	2	0	.1000	.3500
Aug. 2:								
1	100	0	0	0	0	0	0	0
5	99	1	0	0	0	0	.0100	.0099

See footnotes at end of table.

TABLE 10.—*Distribution of salt-marsh caterpillar larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit			Mean	Variance
	0	1	2		
Field 7 (1 acre) [8]					
July 27:					
1	99	1	0	0.0100	0.0099
5	99	0	1	.0200	.0396
Sept. 13:					
1	99	1	0	.0100	.0099
5	99	1	0	.0100	.0099
Field 8 (1 acre) [9]					
July 31:					
1	100	0		0	0
5	100	0		0	0
10	99	1		.0100	.0099
Sept. 18, 1	98	2		.0200	.0196
Field 9 (1 acre) [10]					
July 27:					
1	100	0	0	0	0
5	100	0	0	0	0
10	99	1	0	.0100	.0099
Aug. 17:					
1	99	1	0	.0100	.0099
5	98	1	1	.0300	.0491
10	98	1	1	.0300	.0491
Aug. 28:					
1	100	0	0	0	0
5	98	2	0	.0200	.0196
10	98	1	1	.0300	.0491
Field 10 (1 acre)					
Aug. 29:					
1	100	0		0	0
5	99	1		.0100	.0099
10	97	3		.0300	.0291
Field 12 (1 acre)					
Sept. 28:					
1	96	4	0	.0400	.0384
5	95	2	3	.0800	.1336
Oct. 2:					
1	100	0	0	0	0
5	93	6	1	.0800	.0936
Oct. 4:					
1	100	0	0	0	0
5	98	2	0	.0200	.0196
Oct. 9:					
1	99	1	0	.0100	.0099
5	99	1	0	.0100	.0099

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[1] No larvae detected in 1-, in 1- and 5-, or in 1-, 5-, 10-, and 20-plant units on Sept. 14, on Aug. 1, and on June 7, respectively.

[2] No larvae detected in 1-, in 1- and 5-, in 1-, 5-, and 10-, or in 1-, 5-, 10-, and 20-plant units on Sept. 19, on Aug. 21, on June 29, and on June 8 and 19, respectively.

[3] No larvae detected in 1- and 5-, in 1-, 5-, and 10-, or in 1-, 5-, 10-, and 20-plant units on Aug. 31, on June 13, 20, 21, and Aug. 10, and on June 12, respectively.

[4] No larvae detected in 1- and 5- or in 1-, 5-, and 10-plant units on Aug. 18 and on June 23 and Aug. 3, respectively.

[5] No larvae detected in 1- and 5- or in 1-, 5-, and 10-plant units on Aug. 4 and Sept. 6 and on June 26, respectively.

[6] No larvae detected in 1- and 5- or in 1-, 5-, and 10-plant units on Aug. 11 and Sept. 5 and on June 15 and 22, respectively.

[7] No larvae detected in 1- and 5- or in 1-, 5-, and 10-plant units on Aug. 23 and Sept. 7 and on June 13 and July 3, respectively.

[8] No larvae detected in 1- and 5- or in 1-, 5-, 10-, and 20-plant units on Aug. 14 and on June 27, respectively.

[9] No larvae detected in 1-, 5-, and 10- or in 1-, 5-, 10-, and 20-plant units on June 29, July 13, and Aug. 15 and on June 16, respectively.

[10] No larvae detected in 1- and 5- or in 1-, 5-, 10-, and 20-plant units on Aug. 7 and on July 12, respectively.

TABLE 11.—*Distribution of pink bollworm larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit										Mean	Variance
	0	1	2	3	4	5	6	7	8	12		
Field 1 (1 acre) [1]												
June 7:												
1	100	0	0	0	0	0	0	0	0	0	0	0
5	99	1	0	0	0	0	0	0	0	0	.0100	.0099
10	98	1	1	0	0	0	0	0	0	0	.0300	.0491
20	98	1	1	0	0	0	0	0	0	0	.0300	.0491
June 28:												
1	99	0	0	1	0	0	0	0	0	0	.0300	.0891
5	99	0	0	1	0	0	0	0	0	0	.0300	.0891
10	99	0	0	1	0	0	0	0	0	0	.0300	.0891
July 7:												
1	100	0	0	0	0	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0	0	0	0	0
10	99	1	0	0	0	0	0	0	0	0	.0100	.0099
July 18:												
1	99	1	0	0	0	0	0	0	0	0	.0100	.0099
5	97	3	0	0	0	0	0	0	0	0	.0300	.0291
Aug. 1:												
1	98	0	1	0	0	0	1	0	0	0	.0800	.3936
5	91	4	1	1	1	0	0	0	1	1	.3300	2.3011
Aug. 24:												
1	100	0	0	0	0	0	0	0	0	0	0	0
5	99	1	0	0	0	0	0	0	0	0	.0100	.0099
Field 2 (1 acre) [2]												
June 19:												
1	100	0	0	0	0	0	0				0	0
5	100	0	0	0	0	0	0				0	0
10	100	0	0	0	0	0	0				0	0
20	98	2	0	0	0	0	0				.0200	.0196
June 29:												
1	98	2	0	0	0	0	0				.0200	.0196
5	91	5	4	0	0	0	0				.1300	.1931
10	86	7	4	0	2	0	1				.2900	.8259
July 10:												
1	100	0	0	0	0	0	0				0	0
5	100	0	0	0	0	0	0				0	0
10	99	1	0	0	0	0	0				.0100	.0099
July 28:												
1	100	0	0	0	0	0	0				0	0
5	99	1	0	0	0	0	0				.0100	.0099
Aug. 8:												
1	100	0	0	0	0	0	0				0	0
5	98	2	0	0	0	0	0				.0200	.0196
Sept. 19, 1	99	1	0	0	0	0	0				.0100	.0099
Field 3 (30 acres)												
June 12:												
1	100										0	0
5	100										0	0
10	100										0	0
20	100										0	0
June 13:												
1	100										0	0
5	100										0	0
10	100										0	0
June 20:												
1	100										0	0
5	100										0	0
10	100										0	0
June 21:												
1	100										0	0
5	100										0	0
10	100										0	0
July 5:												
1	100										0	0
5	100										0	0
10	100										0	0
July 24:												
1	100										0	0
5	100										0	0
July 25:												
1	100										0	0
5	100										0	0
Aug. 10:												
1	100										0	0
5	100										0	0
10	100										0	0
Aug. 31:												
1	100										0	0
5	100										0	0

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit	Mean	Variance
	0		
Field 4 (75 acres)			
June 14:			
1	100	0	0
5	100	0	0
10	100	0	0
20	100	0	0
June 15:			
1	100	0	0
5	100	0	0
10	100	0	0
June 23:			
1	100	0	0
5	100	0	0
10	100	0	0
June 26:			
1	100	0	0
5	100	0	0
10	100	0	0
July 19:			
1	100	0	0
5	100	0	0
July 20:			
1	100	0	0
5	100	0	0
Aug. 3:			
1	100	0	0
5	100	0	0
10	100	0	0
Aug. 4:			
1	100	0	0
5	100	0	0
Aug. 18:	100	0	0
1	100	0	0
5	100	0	0
Sept. 6:			
1	100	0	0
5	100	0	0
Field 5 (72 acres)			
June 15:			
1	100	0	0
5	100	0	0
10	100	0	0
June 22:			
1	100	0	0
5	100	0	0
10	100	0	0
July 5:			
1	100	0	0
5	100	0	0
10	100	0	0
July 14:			
1	100	0	0
5	100	0	0
July 26:			
1	100	0	0
5	100	0	0
Aug. 11:			
1	100	0	0
5	100	0	0
Sept. 5:			
1	100	0	0
5	100	0	0
Field 6 (61 acres)			
June 13:			
1	100	0	0
5	100	0	0
10	100	0	0
June 23:			
1	100	0	0
5	100	0	0
10	100	0	0
July 3:			
1	100	0	0
5	100	0	0
10	100	0	0
July 21:			
1	100	0	0
5	100	0	0
Aug. 2:			
1	100	0	0
5	100	0	0

See footnotes at end of table.

TABLE 11.—*Distribution of pink bollworm larvae in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit	Mean	Variance
	0		
Field 6 (61 acres)—Con.			
Aug. 23:			
1	100	0	0
5	100	0	0
Sept. 7:			
1	100	0	0
5	100	0	0
Field 7 (1 acre)			
June 27:			
1	100	0	0
5	100	0	0
10	100	0	0
20	100	0	0
July 27:			
1	100	0	0
5	100	0	0
Aug. 14:			
1	100	0	0
5	100	0	0
Sept. 13:			
1	100	0	0
5	100	0	0

Field, date, and plants per unit	Plant units (number) with indicated number of larvae per unit		Mean	Variance
	0	1		
Field 8 (1 acre) [3]				
July 13:				
1	100	0	0	0
5	99	1	.0100	.0099
10	99	1	.0100	.0099
Field 9 (1 acre) [4]				
Aug. 28:				
1	100	0	0	0
5	98	2	.0200	.0196
10	97	3	.0300	.0291
Field 10 (1 acre)				
Aug. 29:				
1	100		0	0
5	100		0	0
10	100		0	0
Field 11 (1 acre)				
Aug. 21:				
1	100		0	0
5	100		0	0
10	100		0	0

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[1] No larvae detected in 1-plant unit on Sept. 14.

[2] No larvae detected in 1- and 5- or in 1-, 5-, 10-, and 20-plant units on Aug. 21 and on June 8, respectively.

[3] No larvae detected in 1-, in 1-, 5-, and 10-, or in 1-, 5-, 10-, and 20-plant units on Sept. 18, on Juue 29, July 31, and Aug. 15, and on June 16, respectively.

[4] No larvae detected in 1- and 5-, in 1-, 5-, and 10-, or in 1-, 5-, 10-, and 20-plant units on Aug. 7, on July 27 and Aug. 17, and on July 12, respectively.

TABLE 12.—*Distribution of pink bollworm exit holes in bolls in 100 plant units selected at random in 1-acre block in cottonfield 12, 1967*

Date and plants per unit[1]	Plant units (number) with indicated number of exit holes per unit																																									Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	33	34	35	38	39	45	46	47	48	49		
Oct. 2:																																											
1	27	18	23	10	10	7	1	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2. 1000	4. 6100
5	2	3	5	7	9	9	5	11	5	6	6	8	4	3	1	2	2	5	0	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	6. 3600	14. 3640
Oct. 4:																																											
1	32	22	22	12	4	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1. 6200	2. 6556
5	9	8	8	11	11	7	4	10	4	1	3	9	4	4	0	1	0	2	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	6. 4700	32. 5891
Oct. 9:																																											
1	17	14	13	13	9	7	7	4	5	2	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3. 7700	11. 0571
5	2	1	1	1	2	2	4	1	5	3	6	8	8	6	2	7	3	7	1	5	4	1	1	5	3	2	2	1	0	1	1	0	0	1	1	0	1	0	1	0	0	15. 2000	73. 1515

[1] No exit holes detected in 1- and 5-plant units on Sept. 28.

TABLE 13.—*Distribution of boll weevil adults in 100 plant units selected at random in 1-acre blocks in various cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of adults per unit									Mean	Variance
	0	1	2	3	4	5	6	7	8		
Field 12											
Sept. 28:											
1	98	2	0	0	0	0	0	0	0	0.0200	0.0196
5	94	6	0	0	0	0	0	0	0	.0600	.0564
Oct. 2:											
1	100	0	0	0	0	0	0	0	0	0	0
5	97	1	1	1	0	0	0	0	0	.0600	.1364
Oct. 4:											
1	100	0	0	0	0	0	0	0	0	0	0
5	98	2	0	0	0	0	0	0	0	.0200	.0196
Oct. 9:											
1	86	7	5	1	0	0	0	1	0	.2700	.7771
5	44	23	13	12	5	2	0	0	1	1.2300	2.2571
Field 13 [1]											
July 13:											
1	100	0	0							0	0
5	97	3	0							.0300	.0291
10	91	8	1							.1000	.1100
20	84	14	2							.1800	.1876
Field 14											
June 20:											
1	100	0	0							0	0
5	100	0	0							0	0
10	100	0	0							0	0
20	98	0	2							.0400	.0784
July 18:											
1	100	0	0							0	0
5	99	1	0							.0100	.0099
10	98	2	0							.0200	.0196
20	98	2	0							.0200	.0196
July 28:											
1	99	1	0							.0100	.0099
5	99	1	0							.0100	.0099
10	99	1	0							.0100	.0099
20	98	2	0							.0200	.0196
Field 15											
June 22:											
1	100	0	0							0	0
5	100	0	0							0	0
10	99	1	0							.0100	.0099
20	99	1	0							.0100	.0099
Aug. 1:											
1	92	7	1							0.0900	0.1019
5	82	16	2							.2000	.2000
10	73	21	6							.3300	.3411
	0	1	2	3	4						
Field 16											
July 26:											
1	100	0	0	0	0					0	0
5	99	0	1	0	0					.0200	.0396
10	98	1	1	0	0					.0300	.0491
20	98	1	0	0	1					.0500	.1675
Sept. 1:											
1	98	2	0	0	0					.0200	.0196
5	96	4	0	0	0					.0400	.0384
Field 17											
July 31:											
1	99	1	0	0						.0100	.0099
5	99	1	0	0						.0100	.0099
10	96	3	1	0						.0500	.0675
20	91	8	1	0						.1000	.1100
Aug. 17:											
1	92	8	0	0						.0800	.0736
5	83	15	1	1						.2000	.2400
Field 18											
June 12:											
1	98	2	0	0						.0200	.0196
5	91	8	1	0						.1000	.1100
10	88	11	1	0						.1300	.1331
20	84	12	3	1						.2100	.2859
Field 19											
June 12:											
1	100	0	0	0	0					0	0
5	100	0	0	0	0					0	0
10	90	10	0	0	0					.1000	.0900
20	86	8	5	0	1					.2200	.3916

[1] No adults detected in 1-, 5-, 10-, and 20-plant units on June 20.

TABLE 14.—*Distribution of boll weevil feeding punctures in 100 plant units selected at random in 1-acre blocks in various cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of punctures per unit																							Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	27	28	29	30		
Field 12																									
Sept. 28:																									
1	52	25	15	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8300	1.1611
5	16	13	17	11	10	8	9	5	4	3	0	3	0	1	0	0	0	0	0	0	0	0	0	3.5400	8.8684
Oct. 2:																									
1	67	21	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.4700	.5691
5	28	22	17	12	8	7	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9700	3.5491
Oct. 4:																									
1	86	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.1600	.1744
5	62	21	11	4	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	.7400	2.8724
Oct. 9:																									
1	44	20	15	7	4	3	1	2	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1.7600	10.8024
5	8	10	6	13	16	6	8	7	4	4	3	1	3	1	5	0	2	0	1	0	0	1	1	9.4661	96.1472

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	21	22	23	24	25	28	29	30	31	32	38	51		
Field 13																																	
June 20:																																	
1	85	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.1600	.1544
5	57	26	12	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.6700	.9011
10	43	23	16	9	4	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2700	2.5171
20	35	10	14	15	9	5	4	3	2	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3800	6.9356
July 13:																																	
1	78	15	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.3400	.5844
5	39	15	17	10	4	5	2	1	4	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0600	7.2764
10	23	11	11	16	9	5	3	5	2	3	0	0	2	3	0	3	1	1	0	1	0	0	0	0	0	0	1	0	0	0	0	4.3000	26.9900
20	15	10	11	10	7	6	4	6	6	2	1	3	3	2	0	3	0	2	0	2	0	1	1	1	1	0	0	0	1	1	1	6.6700	79.7182

	0	1	2	3	4	5	6	7	8	9	10	11	12	16		
Field 14																
June 20:																
1	96	4	0	0	0	0	0	0	0	0	0	0	0	0	.0400	.0384
5	88	11	1	0	0	0	0	0	0	0	0	0	0	0	.1300	.1331
10	75	21	4	0	0	0	0	0	0	0	0	0	0	0	.2900	.2859
20	55	27	15	1	1	1	0	0	0	0	0	0	0	0	.6900	.8939
July 18:																
1	77	17	3	2	1	0	0	0	0	0	0	0	0	0	.3300	.5211
5	42	29	17	5	3	3	1	0	0	0	0	0	0	0	1.1100	1.7779
10	27	20	23	11	11	5	1	0	0	1	0	0	1	0	1.9500	3.9275
20	10	12	16	14	21	9	3	4	2	4	3	0	1	1	3.7100	8.4259
July 28:																
1	94	6	0	0	0	0	0	0	0	0	0	0	0	0	.0600	.0564
5	72	19	6	2	0	0	1	0	0	0	0	0	0	0	.4300	.7851
10	45	25	19	6	0	3	1	1	0	0	0	0	0	0	1.0900	1.9619
20	29	23	18	9	6	9	2	0	3	1	0	0	0	0	2.0000	4.4200

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	20	23		
Field 15																				
June 22:																				
1	96	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0400	.0384
5	89	9	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	.1683	.2984
10	77	14	5	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	.3800	.6956
20	69	18	5	2	4	1	1	0	0	0	0	0	0	0	0	0	0	0	.6100	1.4379
Aug. 1:																				
1	63	23	5	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	.6700	1.3211
5	19	15	14	14	9	11	6	5	1	1	4	0	0	1	0	0	0	0	3.1700	7.8611
10	3	6	11	10	13	12	7	8	6	8	5	3	2	1	2	1	1	1	5.9400	16.6164

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	21	22	23	26	27		
Field 16																									
July 26:																									
1	77	15	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.3200	.4176
5	41	16	22	14	2	3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4000	2.5800
10	16	16	20	17	7	10	5	4	3	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2.9300	6.7651
20	15	10	9	18	9	10	6	4	3	6	2	1	1	3	0	2	0	0	0	0	1	0	0	4.4500	16.6275
Sept. 1:																									
1	35	26	20	6	6	2	1	0	0	1	0	0	1	0	0	0	0	2	0	0	0	0	0	1.7900	8.2459
5	14	12	9	13	13	11	10	3	3	4	1	1	2	1	0	0	0	0	1	0	0	1	1	4.4900	21.7899

	0	1	2	3	4	5	6	7	8	9	11	12	13	14	15	16		
Field 17																		
July 31:																		
1	71	18	8	1	0	0	0	2	0	0	0	0	0	0	0	0	.5100	1.3099
5	28	28	25	8	5	3	1	1	0	0	0	0	0	0	0	0	1.6000	2.8400
10	12	13	13	22	13	12	6	6	1	0	1	1	0	0	0	0	3.2600	5.4724
20	7	6	7	10	13	15	8	18	4	4	1	0	2	1	0	0	5.1000	9.1100
Aug. 17:																		
1	41	30	14	10	2	2	0	1	0	0	0	0	0	0	0	0	1.1300	1.7931
5	16	12	12	17	18	9	6	1	2	2	0	1	3	0	0	1	3.4800	9.7696
Field 18																		
June 12:																		
1	95	2	2	1	0	0	0										.0900	.1819
5	76	19	2	2	1	0	0										.3300	.5011
10	65	24	8	1	1	1	0										.5200	.7896
20	57	22	7	8	2	2	2										.9000	1.9500
Field 19																		
June 12:																		
1	93	5	1	0	1	0	0	0									.1100	.2379
5	75	16	6	2	0	1	0	0									.3900	.6779
10	53	27	10	5	1	3	0	1									.8800	1.7456
20	41	21	15	11	5	6	0	1									1.4100	2.6019

TABLE 15.—*Distribution of boll weevil egg punctures in 100 plant units selected at random in 1-acre blocks in various cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of punctures per unit																Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Field 12																		
Sept. 28:																		
1	52	26	16	5	1	0	0	0	0	0	0	0	0	0	0	0	0. 7700	0. 9171
5	22	12	12	13	10	9	7	4	4	1	4	1	1	0	0	0	3. 3400	8. 9644
Oct. 2:																		
1	73	21	6	0	0	0	0	0	0	0	0	0	0	0	0	0	. 3300	. 3411
5	38	29	19	9	3	2	0	0	0	0	0	0	0	0	0	0	1. 1600	1. 4944
Oct. 4:																		
1	61	28	6	2	3	0	0	0	0	0	0	0	0	0	0	0	. 5800	. 8436
5	26	27	10	13	4	5	5	4	1	3	0	1	0	1	0	0	2. 4400	7. 5064
Oct. 9:																		
1	76	16	4	0	2	1	1	0	0	0	0	0	0	0	0	0	. 4300	1. 0651
5	40	28	8	6	5	3	0	1	1	2	4	0	0	0	0	2	2. 0000	9. 9400

Field, date, and plants per unit	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	37	Mean	Variance
Field 13																																			
June 20:																																			
1	89	9	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 1500	. 2475
5	73	16	5	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 4700	. 9091
10	60	19	8	4	3	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 9700	2. 8691
20	41	24	12	10	2	2	1	3	1	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1. 7400	6. 5724
July 13:																																			
1	70	13	9	5	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 6000	1. 2400
5	33	18	14	11	5	7	5	0	1	2	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2. 4600	10. 2884
10	19	17	11	4	5	9	7	7	2	3	0	3	4	0	2	0	0	2	1	0	0	0	1	0	0	2	1	0	0	0	0	0	0	5. 0900	34. 2019
20	11	11	8	9	5	7	5	10	2	1	3	1	2	3	1	2	2	2	0	1	0	1	1	2	1	3	1	1	1	1	0	1	1	7. 1600	93. 3175
Field 14																																			
June 20:																																			
1	98	2	0	0	0	0	0	0	0	0	0	0	0	0	0																			. 0200	. 0196
5	95	3	1	1	0	0	0	0	0	0	0	0	0	0	0																			. 0800	. 1536
10	85	11	3	1	0	0	0	0	0	0	0	0	0	0	0																			. 2000	. 2800
20	74	14	9	2	0	0	0	0	1	0	0	0	0	0	0																			. 4600	1. 1084
July 18:																																			
1	94	4	1	0	0	1	0	0	0	0	0	0	0	0	0																			. 1100	. 3179
5	84	6	6	1	2	1	0	0	0	0	0	0	0	0	0																			. 3400	. 8444
10	72	11	9	1	4	2	0	1	0	0	0	0	0	0	0																			. 6500	1. 7675
20	52	19	13	6	5	3	1	1	0	0	0	0	0	0	0																			1. 1100	2. 4179
July 28:																																			
1	97	3	0	0	0	0	0	0	0	0	0	0	0	0	0																			. 0300	. 0291
5	84	8	7	1	0	0	0	0	0	0	0	0	0	0	0																			. 2500	. 3875
10	65	16	11	2	2	2	0	0	1	0	0	0	0	0	1																			. 8400	3. 4944
20	40	26	18	7	2	1	1	2	0	0	0	2	0	0	1																			1. 5200	5. 5896

Field 15																															
June 22:																															
1	99	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0100	.0099
5	96	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0800	.1736
10	91	4	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.1700	.4211
20	85	8	4	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.2700	.5971
Aug. 1:																															
1	69	10	10	8	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.6900	1.5139
5	34	16	9	16	5	7	3	0	5	1	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5600	9.8264
10	20	12	9	13	5	5	8	5	5	4	3	2	2	0	1	1	1	0	0	0	0	1	0	1	1	0	0	0	1	4.9000	29.8300

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	20	24		
Field 16																						
July 26:																						
1	83	16	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.1900	.2139
5	49	28	12	6	2	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	.9800	2.1596
10	27	25	25	6	3	8	4	0	1	0	0	0	0	1	0	0	0	0	0	0	1.9000	4.4300
20	16	20	21	11	9	6	2	3	1	4	1	3	1	1	0	0	0	1	0	0	3.2300	11.2571
Sept. 1:																						
1	55	23	11	5	4	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	.8900	1.8179
5	26	19	11	12	6	3	5	3	2	1	3	1	1	0	0	3	1	1	1	1	3.6700	22.9211
Field 17																						
July 31:																						
1	76	16	6	2	0	0	0	0	0	0	0	0	0								.3400	.4644
5	48	25	9	10	5	2	1	0	0	0	0	0	0								1.0900	1.9819
10	24	15	21	20	6	10	2	1	0	0	0	0	0								2.1800	3.3476
20	13	7	16	15	16	16	0	7	3	4	1	1	1								3.7000	7.1700
Aug. 17:																						
1	55	28	9	8	0	0	0	0	0	0	0	0	0								.7000	.8700
5	32	19	11	13	6	9	4	2	3	1	0	0	0								2.2000	5.3200

	0	1	2	3	6	7		
Field 18								
June 12:								
1	96	4	0	0	0	0	.0400	.0384
5	89	10	1	0	0	0	.1200	.1256
10	83	14	1	1	1	0	.2500	.5675
20	79	14	5	1	0	1	.3400	.8044

	0	1	2	3	4	5		
Field 19								
June 12:								
1	99	1	0	0	0	0	.0100	.0099
5	88	9	2	1	0	0	.1600	.2344
10	70	21	6	2	0	1	.4400	.6864
20	59	20	13	7	0	1	.7200	1.0816

TABLE 16.—*Distribution of* Lygus *nymphs in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of nymphs per unit														Mean	Variance
	0	1	2	3	4	5	6	7	8	9	10	11	12	13		
Field (1 acre)[1]																
June 7:																
1	96	3	0	0	1	0	0	0	0	0	0	0	0	0	0. 0700	0. 1851
5	89	8	1	1	0	0	1	0	0	0	0	0	0	0	. 1900	. 5339
10	86	8	1	4	0	0	1	0	0	0	0	0	0	0	. 2800	. 7616
20	83	6	2	4	1	2	0	0	1	1	0	0	0	0	. 5300	2. 3291
June 28:																
1	93	5	1	1	0	0	0	0	0	0	0	0	0	0	. 1000	. 1700
5	73	5	9	4	4	3	1	0	0	1	0	0	0	0	. 8100	2. 6739
10	66	2	7	6	6	0	3	2	4	1	1	1	0	1	1. 6500	8. 4075
July 7:																
1	99	1	0	0	0	0	0	0	0	0	0	0	0	0	. 0100	. 0099
5	89	9	0	2	0	0	0	0	0	0	0	0	0	0	. 1500	. 2475
10	85	7	3	3	0	1	0	1	0	0	0	0	0	0	. 3400	1. 0844
July 18:																
1	95	2	3	0	0	0	0	0	0	0	0	0	0	0	. 0800	. 1336
5	87	0	8	3	0	1	1	0	0	0	0	0	0	0	. 3600	1. 0704

	0	1	2	7	Mean	Variance
Field 2 (1 acre)[2]						
June 19:						
1	99	1	0	0	. 0100	. 0099
5	99	1	0	0	. 0100	. 0099
10	99	1	0	0	. 0100	. 0099
20	99	1	0	0	. 0100	. 0099
June 29:						
1	98	2	0	0	. 0200	. 0196
5	97	3	0	0	. 0300	. 0291
10	97	3	0	0	. 0300	. 0291
July 10:						
1	100	0	0	0	0	0
5	99	1	0	0	. 0100	. 0099
10	99	1	0	0	. 0100	. 0099
July 28:						
1	98	1	1	0	. 0300	. 0491
5	95	2	2	1	. 1300	. 5731
Field 3 (1 acre)[3]						
June 12:						
1	99	1	0		. 0100	. 0099
5	98	2	0		. 0200	. 0196
10	97	2	1		. 0400	. 0584
20	97	2	1		. 0400	. 0584
June 21:						
1	99	1	0		. 0100	. 0099
5	99	1	0		. 0100	. 0099
10	99	1	0		. 0100	. 0099

	0	1	11	Mean	Variance
Field 3 (30 acres)[4]					
June 13:					
1	100	0	0	0	0
5	98	1	1	. 1200	1. 2056
10	98	1	1	. 1200	1. 2056
June 20:					
1	100	0	0	0	0
5	100	0	0	0	0
10	99	1	0	. 0100	. 0099

See footnotes at end of table.

TABLE 16.—*Distribution of* Lygus *nymphs in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of nymphs per unit 0	1	2	5	Mean	Variance
Field 4 (1 acre) [5]						
June 14:						
1	100	0	0	0	0	0
5	97	3	1	0	.0495	.0669
10	93	3	4	0	.1100	.1779
20	92	3	4	1	.1600	.4144

Field, date, and plants per unit	0	1	2	3	4	5	Mean	Variance
Field 4 (75 acres) [6]								
June 15:								
1	100	0	0	0	0	0	0	0
5	96	1	2	1	0	0	.0800	.1736
10	95	1	1	1	0	2	.1600	.6144
June 26:								
1	100	0	0	0	0	0	0	0
5	99	1	0	0	0	0	.0100	.0099
10	99	1	0	0	0	0	.0100	.0099
Field 5 (72 acres) [7]								
June 15:								
1	99	1	0	0			.0100	.0099
5	97	0	3	0			.0600	.1164
10	95	1	3	1			.1000	.2100
June 22:								
1	100	0	0	0			0	0
5	98	2	0	0			.0200	.0196
10	94	5	1	0			.0700	.0851
July 5:								
1	99	1	0	0			.0100	.0099
5	99	1	0	0			.0100	.0099
10	98	2	0	0			.0200	.0196
Field 6 (61 acres) [8]								
June 23:								
1	100	0	0				0	0
5	99	0	1				.0200	.0396
10	99	0	1				.0200	.0396
July 3:								
1	100	0	0				0	0
5	99	1	0				.0100	.0099
10	99	1	0				.0100	.0099
July 21:								
1	100	0	0				0	0
5	99	0	1				.0200	.0396
Field 7 (1 acre) [9]								
July 27:								
1	100	0	0				0	0
5	96	3	1				.0500	.0675

Field, date, and plants per unit	0	1	2	3	4	7	Mean	Variance
Field 8 (1 acre) [10]								
June 16:								
1	98	1	1	0	0	0	.0300	.0491
5	97	1	1	0	1	0	.0700	.2051
10	94	4	1	0	1	0	.1000	.2300
20	94	3	1	1	1	0	.1200	.3056
June 29:								
1	100	0	0	0	0	0	0	0
5	100	0	0	0	0	0	0	0
10	98	2	0	0	0	0	.0200	.0196

See footnotes at end of table.

TABLE 16.—*Distribution of* Lygus *nymphs in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of nymphs per unit						Mean	Variance
	0	1	2	3	4	7		
Field 8 (1 acre)[10]—Con.								
July 13:								
1	98	2	0	0	0	0	0. 0200	0. 0196
5	88	8	2	2	0	0	. 1800	. 3076
10	80	11	3	2	3	1	. 4200	1. 2036
Field 9 (1 acre)[11]								
July 12:								
1	100	0	0	0			0	0
5	99	1	0	0			. 0100	. 0099
10	99	1	0	0			. 0100	. 0099
20	98	2	0	0			. 0200	. 0196
July 27:								
1	99	1	0	0			. 0100	. 0099
5	90	10	0	0			. 1000	. 0900
10	94	9	3	4			. 2455	. 4579
Aug. 7:								
1	99	1	0	0			. 0100	. 0099
5	98	2	0	0			. 0200	. 0196
Aug. 28:								
1	100	0	0	0			0	0
5	99	1	0	0			. 0100	. 0099
10	98	2	0	0			. 0200	. 0196
Field 10 (1 acre)								
Aug. 29:								
1	100						0	0
5	100						0	0
10	100						0	0
Field 11 (1 acre)								
Aug. 21:								
1	100						0	0
5	100						0	0
10	100						0	0
Field 12 (1 acre)								
Sept. 28:								
1	100						0	0
5	100						0	0
Oct. 2:								
1	100						0	0
5	100						0	0
Oct. 4:								
1	100						0	0
5	100						0	0
Oct. 9:								
1	100						0	0
5	100						0	0

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[1] No nymphs detected in 1- or in 1- and 5-plant units on Sept. 14 and on Aug. 1 and 24, respectively.

[2] No nymphs detected in 1- or in 1- and 5-plant units on Sept. 19 and on Aug. 8 and 21, respectively.

[3] No nymphs detected in 1- and 5-plant units on July 25.

[4] No nymphs detected in 1- and 5- or in 1-, 5-, and 10-plant units on July 24 and Aug. 31 and on July 5 and Aug. 10, respectively.

[5] No nymphs detected in 1- and 5- or in 1-, 5-, and 10-plant units on July 19 and Aug. 18 and on June 23 and Aug. 3, respectively.

[6] No nymphs detected in 1- and 5-plant units on July 20, Aug. 4, and Sept. 6.

[7] No nymphs detected in 1- and 5-plant units on July 14, 26, Aug. 11, and Sept. 5.

[8] No nymphs detected in 1- and 5- or in 1-, 5-, and 10-plant units on Aug. 2, 23, and Sept. 7 and on June 13, respectively.

[9] No nymphs detected in 1- and 5- or in 1-, 5-, 10-, and 20-plant units on Aug. 14 and Sept. 13 and on June 27, respectively.

[10] No nymphs detected in 1- or in 1-, 5-, and 10-plant units on Sept. 18 and on July 31 and Aug. 15, respectively.

[11] No nymphs detected in 1-, 5-, and 10-plant units on Aug. 17.

TABLE 17.—*Distribution of* Lygus *adults in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*

Field, date, and plants per unit	Plant units (number) with indicated number of adults per unit								Mean	Variance
	0	1	2	3	4	5	6	7		
Field 1 *(1 acre)*[1]										
June 7:										
1	94	5	0	0	1	0	0	0	0.0900	0.2019
5	81	14	2	1	1	0	1	0	.3000	.6300
10	73	15	7	2	2	0	0	1	.5000	1.1700
20	57	19	14	6	1	1	1	1	.8700	1.7931
June 28:										
1	88	8	4	0	0	0	0	0	.1600	.2144
5	69	19	9	3	0	0	0	0	.4600	.6084
10	60	20	13	4	3	0	0	0	.7000	1.0700
July 7:										
1	97	3	0	0	0	0	0	0	.0300	.0291
5	93	4	3	0	0	0	0	0	.1000	.1500
10	88	7	4	0	1	0	0	0	.1900	.3539
July 18:										
1	98	2	0	0	0	0	0	0	.0200	.0196
5	86	9	5	0	0	0	0	0	.1900	.2539
Field 2 *(1 acre)*[2]										
June 8:										
1	100	0.	0	0	0	0	0	0	0	0
5	96	4	0	0	0	0	0	0	.0400	.0384
10	93	6	1	0	0	0	0	0	.0800	.0936
20	89	10	1	0	0	0	0	0	.1200	.1256
June 19:										
1	96	3	1	0	0	0	0	0	.0500	.0675
5	86	10	3	0	1	0	0	0	.2000	.3400
10	83	7	6	3	0	1	0	0	.3300	.7211
20	78	10	6	4	0	1	0	1	.4600	1.2284
June 29:										
1	97	3	0	0	0	0	0	0	.0300	.0291
5	89	9	2	0	0	0	0	0	.1300	.1531
10	81	12	3	4	0	0	0	0	.3000	.5100
July 10:										
1	100	0	0	0	0	0	0	0	0	0
5	96	4	0	0	0	0	0	0	.0400	.0384
10	95	5	0	0	0	0	0	0	.0500	.0475
Field 3 *(1 acre)*										
June 12:										
1	99	1	0	0					.0100	.0099
5	91	8	1	0					.1000	.1100
10	89	10	1	0					.1200	.1256
20	81	16	1	2					.2400	.3224
June 21:										
1	99	1	0	0					.0100	.0099
5	97	3	0	0					.0300	.0291
10	94	6	0	0					.0600	.0564
July 25:										
1	99	1	0	0					.0100	.0099
5	97	2	1	0					.0400	.0584
Field 3 *(30 acres)*[3]										
June 13:										
1	96	3	1	0	0				.0500	.0675
5	93	4	3	0	0				.1000	.1500
10	84	11	3	1	1				.2400	.4224
June 20:										
1	98	1	1	0	0				0.0300	0.0491
5	92	7	1	0	0				.0900	.1019
10	85	11	4	0	0				.1900	.2339
Aug. 31:										
1	99	1	0	0	0				.0100	.0099
5	99	1	0	0	0				.0100	.0099
Field 4 *(1 acre)*[4]										
June 14:										
1	100	0							0	0
5	99	1							.0100	.0099
10	97	3							.0300	.0291
20	95	5							.0500	.0475
June 23:										
1	99	1							.0100	.0099
5	99	1							.0100	.0099
10	99	1							.0100	.0099
Field 4 *(75 acres)*[5]										
June 15:										
1	96	4	0						.0400	.0384
5	94	5	1						.0700	.0851
10	88	11	1						.1300	.1331
June 26:										
1	98	2	0						.0200	.0196
5	97	3	0						.0300	.0291
10	95	5	0						.0500	.0475
Sept. 6:										
1	99	1	0						.0100	.0099
5	99	1	0						.0100	.0099
Field 5 *(72 acres)*[6]										
June 15:										
1	96	4	0	0					.0400	.0384
5	92	5	3	0					.1100	.1579
10	89	8	3	0					.1400	.1804
June 22:										
1	98	2	0	0					.0200	.0196
5	94	4	2	0					.0800	.1136
10	91	6	2	1					.1300	.2131
July 5:										
1	99	1	0	0					.0100	.0099
5	95	5	0	0					.0500	.0475
10	94	6	0	0					.0600	.0564
July 14:										
1	100	0	0	0					0	0
5	99	1	0	0					.0100	.0099
Aug. 11:										
1	99	1	0	0					.0100	.0099
5	99	1	0	0					.0100	.0099

See footnotes at end of table.

TABLE 17.—*Distribution of* Lygus *adults in 100 plant units selected at random in 1-acre blocks and in entire cottonfields, 1967*—Continued

Field, date, and plants per unit	Plant units (number) with indicated number of adults per unit: 0	1	2	3	Mean	Variance
Field 6 *(61 acres)*[7]						
June 13:						
1	100	0	0	0	0	0
5	99	0	1	0	.0200	.0396
10	97	2	1	0	.0400	.0584
June 23:						
1	96	4	0	0	.0400	.0384
5	93	5	1	1	.1000	.1700
10	90	8	0	2	.1400	.2404
July 3:						
1	100	0	0	0	0	0
5	96	4	0	0	.0400	.0384
10	92	8	0	0	.0800	.0736
July 21:						
1	100	0	0	0	0	0
5	99	1	0	0	.0100	.0099
Field 7 *(1 acre)*						
June 27:						
1	99	1	0	0	.0100	.0099
5	97	3	0	0	.0300	.0291
10	93	6	1	0	.0800	.0936
20	92	7	1	0	.0900	.1019
July 27:						
1	100	0	0	0	0	0
5	99	0	0	1	.0300	.0891
Aug. 14:						
1	100	0	0	0	0	0
5	99	0	1	0	.0200	.0396
Sept. 13:						
1	100	0	0	0	0	0
5	99	1	0	0	.0100	.0099
Field 8 *(1 acre)*[8]						
June 16:						
1	97	3	0	0	.0300	.0291
5	90	8	2	0	.1200	.1456
10	88	9	3	0	.1500	.1875
20	77	19	4	0	.2700	.2771
June 29:						
1	98	2	0	0	.0200	.0196
5	98	2	0	0	.0200	.0196
10	96	4	0	0	.0400	.0384
July 13:						
1	99	1	0	0	.0100	.0099
5	93	6	1	0	.0800	.0936
10	84	12	4	0	.2000	.2400

Field, date, and plants per unit	Plant units (number) with indicated number of adults per unit: 0	1	2	3	4	5	Mean	Variance
Field 9 *(1 acre)*								
July 12:								
1	98	1	1	0	0	0	0.0300	0.0491
5	89	10	0	0	1	0	.1400	.2404
10	85	12	0	2	0	1	.2300	.4971
20	78	13	6	2	0	1	.3600	.6704
July 27:								
1	100	0	0	0	0	0	0	0
5	97	3	0	0	0	0	.0300	.0291
10	96	4	0	0	0	0	.0400	.0384
Aug. 7:								
1	96	4	0	0	0	0	.0400	.0384
5	96	2	2	0	0	0	.0600	.0964
Aug. 17:								
1	99	1	0	0	0	0	.0100	.0099
5	98	1	1	0	0	0	.0300	.0491
10	98	1	1	0	0	0	.0300	.0491
Aug. 28:								
1	100	0	0	0	0	0	0	0
5	98	2	0	0	0	0	.0200	.0196
10	97	2	1	0	0	0	.0400	.0584
Field 10 *(1 acre)*								
Aug. 29:								
1	100						0	0
5	100						0	0
10	100						0	0
Field 11 *(1 acre)*								
Aug. 21:								
1	100	0					0	0
5	99	1					.0100	.0099
10	99	1					.0100	.0099

Field, date, and plants per unit	0	1	2	3	6	Mean	Variance
Field 12 *(1 acre)*[9]							
Oct. 2:							
1	98	1	1	0	0	.0300	.0491
5	94	3	1	1	1	.1400	.5004
Oct. 4:							
1	99	1	0	0	0	.0100	.0099
5	99	1	0	0	0	.0100	.0099

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[1] No adults detected in 1- or in 1- and 5-plant units on Sept. 14 and on Aug. 1 and 24, respectively.

[2] No adults detected in 1- or in 1- and 5-plant units on Sept. 19 and on July 28, Aug. 8, and 21, respectively.

[3] No adults detected in 1- and 5- or in 1-, 5-, and 10-plant units on July 24 and on July 5 and Aug. 10, respectively.

[4] No adults detected in 1- and 5- or in 1-, 5-, and 10-plant units on July 19 and Aug. 18 and on Aug. 3, respectively.

[5] No adults detected in 1- and 5-plant units on July 20 and Aug. 4.

[6] No adults detected in 1- and 5-plant units on July 26 and Sept. 5.

[7] No adults detected in 1- and 5-plant units on Aug. 2, 23, and Sept. 7.

[8] No adults detected in 1- or in 1-, 5-, and 10-plant units on Sept. 18 and on July 31 and Aug. 15, respectively.

[9] No adults detected in 1- and 5-plant units on Sept. 28 and Oct. 9.

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